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For 1906

A DIARY is indispensable. For pharmacy and the drug and chemical trades the C. & D. Diary was the first produced and is the best.

It is used daily in every part of the British Empire and in foreign countries having business relations with us.

It is a remarkable help in regard to business inquiries, for it contains a Buyers' Guide, which is an exhaustive index to the Diary advertisements.

No business house connected with the trade should fail to secure space in the Diary for 1906 to advertise their goods, especially their specialities.

The Publisher is now booking orders, and instructions should be addressed to him at 42 Cannon Street, London, E.C., as early as possible.

Known, Admitted, and Approved Remedies.

Chemists' formulæ for these, if published in the C. & D. Diary, 1906, will exempt the preparations from stamp-duty, and should be sent without delay to the Editor, 42 Cannon Street, London, E.C.

Summary.

The subjoined paragraphs give the gist of the more important matters in this issue, with the object of showing at a glance what has happened during the week. See also "Contents" in the first column.

This Number is profitable and useful to practical men.

CHEMISTS who advertise will find a few appropriate phrases and sontenecs to work in on p. 460.

THE CONTRACTS reported in this issue include at least one which was not decided without discussion (p. 462).

SIX MILLION DOLLARS will be the capital of the Canadian wholesalers' combine if it comes off—which is doubtful (p. 467).

AMERICAN cod-liver oil is equal to Norwegian, chemically ad medicinally. This is the conclusion of the U.S.A. drug and medicinally. laboratory (p. 468).

THE REYNOLDS CONUNDRUM has brought us a shoal of We print a selection on p. 472 and another picture Limericks. to fit Limericks to.

PINK ROOT is not always the product of Spigelia marilandica. Mr. Stockberger's particulars about the matter are briefly given on p. 469.

MORPHINE may be used for detecting formaldehyde, and, inversely, formadehyde detects morphine and its derivatives. For the details see p. 469.

The Pharmacy cricket season now gives place to football. The first report on the latter comes from Newcastle-on-Tyne: The chemists' team won (p. 462).

MR. JOHNSTON MONTGOMERY, Belfast, wishes to retire from the Irish Pharmaceutical Council, but his colleagues ask him to reconsider the matter (p. 470).

GRINDELIA does not, according to Dr. Power and Mr. Tutin, contain either a glucoside or an alkaloid. Its medicinal properties are due to resins (p. 468).

THE DISPENSING NOTES in this issue give scope for some experiment on the part of our readers, and we invite their co-operation in solving the difficulties (p. 485).

TOOTHACHE is one of the ailments which chemists and druggists are daily called upon to treat, so that they will find useful the observations by a leading dentist on p. 472.

CONTINUING our remarks on Future Pharmacy Legislation we show how the Poisons Schedulc has been so complicated that it can only be made straight by Act of Parliament (p. 474).

MEDICAL OFFICERS of the Local Government Board hint that the addition of formalin to milk induces "epidemic eczema." This ought to be proved without delay, we argue in an article on p. 476.

A Proposal to institute a compulsory course in pharmacy for the Irish Pharmaccutical examinations, and to establish a school for the purpose, has not met with the support of the Council (p. 470).

X-RAYSER wants to know why sewing-machines and similar things are imitated without the rebuke heaped on chemists when they take advantage of a popular craze in their own lines of goods (p. 473).

ALL preparations containing opium or certain other poisons for sale in the Orange River Colony must henceforth be labelled with the name of the poison and the proportion of it in the preparation (p. 475).

THE CAPE TREASURY has tapped a new source of revenue by requiring chemists to take out the annual shopkeepers' licence as well as their own. The partners of Messrs. Heynes, Mathew & Co., who defended a test case, have lost the day but have appealed (p. 465).

THE SCIENTIFIC SECTION of the American Pharmaceutical Association has this year been presided over by an English pharmaceutical chemist, Mr. E. H. Gane. The work of the section was exceptionally good, and we print abstracts of most of the papers contributed to it (p. 468).

Business in the drug and chemical markets is steady, with few changes. Cocaine is lower. Peppermint oil has been in good demand at advancing prices. Areca, chamomiles, and West Indian tamarinds are also dearer. Menthol, ergot, nitrate of soda, linsced oil, lycopodium, and African geranium oil are more or less easier. An auction of first-hand drugs is reported on p. 487.

INDACONITINE is the alkaloid yielded by Aconitum chasman-AND ACONTINE IS the alkaloid yielded by Acontium chasmanthum, and bikhaconitine is obtained from A. spicatum. They have been prepared in the Imperial Institute laboratories, and in a Royal Society paper by Drs. Theodore Cash and Wyndham R. Dunstan, their chemical and pharmacological properties are shown to be so closely like nap-aconitine that they may be used in place of it (p. 478).

Corner for Students.

CONDUCTED BY LEONARD DOBBIN, Ph.D.

Students, please note. All communications should be addressed to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Stereochemistry.

By W. W. TAYLOR, M.A., D.Sc.

Change of Configuration of Geometrical Isomers.

N many cases the one isomer is much more stable than the other; if this be so, heat will generally cause the complete transformation of the less stable form into the othermaleic acid, which is not stable, goes completely into fumaric acid if carefully heated. But if the two do not differ so widely in stability, heat will convert each of them into a mixture of both isomers, the ratio being constant though generally not molecular. The same transformation can be effected by various catalytic agents-for example, bromine or strong acids convert maleic acid into fumaric acid, traces of nitrous acid convert oleic acid into elaidic acid. Frequently the change of configuration is so easily brought about that the other isomer is obtained instead of the one expected, or a mixture of the two is formed—e.g., salts of maleic acid on treatment with hydrogen sulphide yield a mixture of maleic acid and fumaric acid, and acetylendicarboxylic acid, COOH.C=C.COOH, on addition of bromine should form dibromomaleic acid, but the actual product contains only 30 per cent. of it, and 70 per cent. of dibromofumaric acid.

Configuration of Saturated Compounds.

Only in a few cases can the configuration be assigned to saturated compounds. On reduction, however carefully carried out, fumaric acid and maleic acid yield the same succinic acid; this is easily understood if two singly linked carbon atoms are capable of free rotation, for the two tetrahedra will rotate until the one stable position is reached. But as succinic acid is a very weak acid, and does not readily form an anhydride, it is more like fumaric acid than maleic acid, and probably is of the fumaroid type-

while with successive substitution of H by CH3, the acids become stronger and more readily form anhydrides, and are probably malenoid in configuration.

The structural formula of a normal carbon chain, C1-C2-C3-C4-C5 conveys a totally wrong impression of the relative positions of the carbon atoms and the groups united with them. If a model be constructed by joining five tetrahedra together, care being taken to preserve the normal directions of the valencies, it is seen that C4 and C_5 are much nearer to C_1 than C_2 or C_3 is. Such a model is represented by fig. 10, in which the tetrahedra are so placed that one apex of each is as near as possible to C₁the relative distances from C₁ being C₂ 1, C₃ 1.02, C₄ 0.67, C₅ 0.07. It is now easy to see why a hydroxy acids do not form lactones by loss of water, & acids do so very seldom, while γ and δ hydroxyacids do so with great readiness. Many reactions of a similar nature could be mentionede.g., formation of alkylen oxides from chlorhydrins, anhydride formation by dicarboxylic acids (oxalic and malonic acids do not, succinic and glutaric acids do), lactam formation by γ and δ amino-acids, but not by α or β amino-acids, etc.

Relative Stability of Cyclic Compounds.

The valency directions in fig. 10 are normal, and it is obvious that a very slight change of direction would enable C1 and C5 to join up, forming a pentamethylene ring; a change of each direction by 0° 44' would effect this, and the strain produced would be very small. Such a ring should be very stable, and have very little tendency to open up. The formation of tetramethylene, trimethylene, and dimethylene rings, by joining up C1 with C4, C3, and C2, would cause increasing strains and decreasing stability, since the valency directions would be altered by 9° 341, 24° 441, and 54° 441 respectively. A hexamethylene ring would be between pentamethylene and tetramethylene

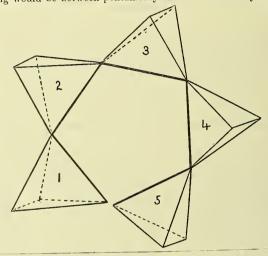


Fig. 10.

in stability, the alteration of direction being -5° 14'; i.e., room would have to be made for C6, as is obvious from fig. 10. These conclusions are borne out by the factsiodine will open up ethylene (dimethylene) but not trimethylene, hydrobromic acid will open up the latter but not tetramethylene, while pentamethylene and hexamethylene (and benzene) rings are known to possess great stability.

Note to Students.—This series of articles will continue until the end of September, when a set of problems and questions will be submitted for reply by students. Prizes will then be awarded for the best papers sent in.—The Editor.

ADVERTISING PHRASES.

THE subjoined phrases and sentences descriptive of drugs and toilet goods are suggested in the September issue of Advertising

Real remedies for all ailments.

Bottled health! That is what folk call the —— Tonic.

Safe to give the children, and just as effective with adults.

Drugs that bear the name of —— can be relied upon for purity and strength.

A remedy for every ill. You state your ailment, and we'll provide the cure. You can take it in small doses, and it will do you more good

You can take it in small doses, and it will do you more good than a large dose of any imitation.

Look after your complexion. The —— Complexion Cream will help you preserve it against wind or cold.

Toilet requisites in lavish profusion. Everything you want, according to modern ideas of health and hygiene.

There's something wrong when your eyes complain of overwork. If you can't see things plainly, see us about it.

The modern woman is often judged by her perfume. Refinement is the keynote of the sweet-smelling flower-extracts sold under our name.

sold under our name. We guarantee perfect and prompt service, purity and accuracy in dispensing all prescriptions. When you are dissatisfied elsewhere, come to us, and we will prove our

Ask your doctor a question. Tell him you want to bring his prescription to us for making up, and ask his opinion. We are content to stand by what he says, for it can only Tell him you want to bring be in our fayour.

Enalish Mews.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Brevities.

With reference to the note in last week's issue (p. 443) regarding the size of postcards, Messrs. Schutze & Co. inform us that it was not so much the length as the depth of the card to which the authorities objected in their case.

Clay pills are recommended for cholera, so a continental report says. As a prophylactic Dr. J. Cavendish Molson told a "Daily Mail" reporter that a copper disc suspended by a silken thread from the neck to the abdomen is "simple, safe, and certain."

Harry Burke was charged before the Manchester magistrates on September 11 with stealing a letter containing two postal orders for 1l. each from the letter-box of Boots Ltd., St. Ann's Street. Manchester. The prisoner was remanded.

The eleventh session of the London County Council School of Photo-engraving and Lithography, 6 Bolt Court, Fleet Street, E.C., commences on Monday, September 18. Trade apprentices, learners, and improvers (under twentyone) are admitted free.

At the meeting of the Longton (Staffs) Town Council on September 6, the lady sanitary inspector reported that a baby which had been given a mixture called "Mother's Friend" had suffered from symptoms of opium-poiscning. The Council instructed the medical officer to have the mixture analysed.

At Hunstanton on September 13, Mr. Richard Winfrey, pharmaceutical chemist, the Liberal candidate for South-West Norfolk, along with several local councillors and a Nonconformist minister, was summoned for non-payment of the education rate. Mr. Winfrey addressed the Bench at some length, but a distress order was issued in each

The funeral of the late Mr. Thomas Christy, F.L.S., who died at Wallington on September 7, aged seventy-three, took place on Monday, September 11, at St. Mary's, Beddington, place on Monday, September 11, at St. Mary's, Beddington, Surrey, the service being conducted by the Rev. W. Boyle. Among the mourners present were his son. Mr. Gilbert Christy, Mr. E. A. Jahn, and Mr. B. Richardson, members of the firm of T. Christy & Co. The company also included several members of the wholesale drug trade.

Scrutator in "Truth" of September 14 devotes three columns to "the latest consumption-cure," which is "Sacco," placed on the market by Messrs. Stevens & Co., of Cape Town, and 22 Basinghall Street. The article is apologetic. Our contemporary had inferred that Sacco is a quack

getic. Our contemporary had inferred that Sacco is a quack imposture and swindling remedy, and that the statements in the advertisements were unfounded. These are practically withdrawn upon evidence detailed in the article.

Potatoes have been found, on numerous recent experiments, both in this country and in Ireland. as also on the Continent, to produce an excellent and abundant spirit, an acre of potatoes yielding nearly five times more spirit than an acre of barley, or about one measure of spirit for sixteen of potatoes. The potato is boiled and bruised, and mixed with water to the consistence of cream; the liquor is suffered to ferment for three days, and then distilled. -The Observer, September 8, 1805.

The Sleaford Tradesmen's Association recently called the attention of the Urban District Council to the fact that disinfectants and weed-killer for the town have been purchased from Lincoln, whereas the goods could have been supplied at the same price by local tradesmen who are large ratepayers. The Association asked for an assurance from the Council that this practice will be stopped. The Council on September 6 decided in future to purchase goods from local tradesmen wherever practicable.

Birmingham Notes.
At 10 Worcester Street, on Tuesday. September 19, at 2.30, there is to be a sale of a chemist's fixtures and stock, without reserve.

 Λ local parliament is in process of formation in Birmingham, and Mr. Marshall Freeman, chemist and barrister, has accepted the speakership.

The Municipal Technical School classes commenced on Wednesday, September 13, and there promises to be a successful pharmacy-students' show in the chemistry, physics and botany classes.

Messrs. Bellamy & Wakefield, chemists, Easy Row and Hagley Road, have given 5l., and Mr. Chase, Edgbaston, halt-a-guinea, to the Warley Woods scheme. Messrs. Chance & Hunt's workmen have sent 134l. 1s. 6d. to the fund inaugurated by the "Mail."

Mr. Alfred Bird, of custard-powder fame, was a victim of a serious bicycle accident on Thursday evening, September 7. Mr. Bird was riding at Solihull, where he resides, when he collided with another cyclist who was riding on the wrong side of the road. Mr. Bird was thrown on the road, and alighting on his head sustained a fractured skull and a broken nose. He was removed to his residence, and so serious were his injuries that Dr. Jordan Lloyd was called in for consultation. He is progressing favourably.

East Anglian Notes.

Messrs. Boots Ltd., who have branches in Norwich, have subscribed 11. 1s. to the Norfolk and Norwich Hospital,

A miniature rifle club is in process of formation at Cromer, and at a preliminary meeting held on Tuesday, Mr. C. J. C. Goodyear, chemist, was elected on the committee.

Referring again to the centenary of Messrs. J. & J. Colman, Ltd. (C. & D., August 5, p. 245), a notice was last week posted at Carrow Works to the effect that, in addition to what has already been announced, a further 2s. per week is to be added to the pensions of those workmen in the company's employ at the time of the complete transfer of the business to Norwich (1860).

The Eastern Counties Veterinary Medical Society met in conclave at Yarmouth last week. The apparatus for the oxygen treatment of milk fever was exhibited and discussed. One of the members, speaking to the writer, deplored the publication in extenso in local newspapers of the Society's transactions. Further conversation proved him to be nervous of agricultural chemists obtaining a few useful tips.

Last year Mr. D. Davison, pharmaceutical chemist, was instrumental in getting the Cromer Urban Council to act as guarantors in the matter of technical classes. renewing his request for a guarantee for the next twelve months, Mr. Davison on Monday reported that there was no claim upon the Council, as owing to the record success the classes had earned in grants sufficient to meet all expenses.

Sheffield Notes. There was quite a pharmaceutical air about the wedding of Miss Blow, Newcastle, which took place in Sheffield last Saturday. Miss Blow is the daughter of a chemist and sister-in-law to another, and the best man was Mr. H. Antcliffe.

The Sheffield Photographic Society have arranged to hold their third annual exhibition at the Montgomery Hall from October 1 to November 4, the last day for delivering entries being October 14. There are seven classes open to all, and six for members only, the awards including a silver-gilt plaque for the champion class and silver and bronze plaques and certificates for the other classes.

The first annual meeting of the Sheffield Pharmacy Athletic Club was held on Wednesday, September 13, at the Montgomery Hall. Mr. T. Douglas presided, and Mr. T. C. S. Richards (Secretary) read his report for the year, in which he stated that Mr. Stathers had won the prize offered by Mr. Williams for the best batting average, and Mr. Wetherall the ball offered by Messrs. Parke, Davis & Co. for the best bowling average. Mr. P. Carr (Treasurer) read the financial report, which was satisfactory. The election of officers for the ensuing year resulted in Mr. Douglas being elected President in succession to Mr. Gilbert Leiken, Messre Williams and Puscell For waveletted. Douglas being elected Fresident in succession to Mr. Gilbert Jackson, Messrs. Williams and Russell Fox were elected Vice-Presidents, Mr. Richards Secretary, and Mr. Carr Treasurer. Messrs. Antcliffe, Preston, Wetherall, and Whitworth were elected on the Committee. A programme of matches for the coming football season was presented by the Secretary. It was decided to allow the assistants of Boots Ltd. to join the club.

At a meeting of the members of the Sheffield lodges of the Twentieth Century Equitable Friendly Society

last week the question of forming a medical association Mr. J. E. Bradwell stated that under the present conditions in Sheffield members, owing to their inability to meet doctors' bills, were often driven to the charitable institutions or to the work-house hospital. At Chesterfield the friendly societies had been subjected to an attempt at medical coercion; and at the present time the medical faculty at Holmfirth would not recognise friendly societies, as was customary in Sheffield. Drugs specially adapted to friendlysociety members were not unknown in Sheffield. A promise was given by those present to further the proposed associa-

Contracts.

Mansfield Workhouse.-Mr. J. A. Pegg has been appointed chemist for the ensuing quarter.

Swaffham Workhouse.—Mr. F. W. Cooper, chemist and druggist, for disinfectants; and Mr. F. Christopherson, pharmaceutical chemist, for medical appliances and oils.

Salford Corporation.-The United Alkali Co., Ltd., is to supply chloride of lime; Messrs. Evans Sons Lescher & Webb, Ltd., drugs and medical and surgical appliances for the hospitals; and Messrs. R. K. Lakin & Co., disinfecting-

The Portsmouth Corporation have accepted the following tenders: Messrs. Adcock, Easton & Co., for commercial liquid carbolic acid; Messrs. Alfred C. Young & mercial liquid carbolic acid; Messrs. Alfred C. Young & Co., for carbolic powder; Jeyes' Sanitary Compounds Co., Ltd., for Jeyes' perfect purifier; Messrs. Pryke & Palmer for McDougall's Nos. 3, 4, and 5 purifier, Izal fluid, Rowan's fluid, Rowan's "Coaltarene," and Rowan's "Eupine"; the Sanitas Co., Ltd., for Sanitas Co.'s "Soldis"; the Formalin Hygienic Co., for formalin tablets; Messrs. Newton, Chambers & Co., for "Izal" powder; Lawes' Chemical Co.. Ltd., for Lawes' disinfecting fluid Nos. 1 and 2; and Messrs Middleton Bros. for "Pynerzone" cubes (Hope).

At a meeting of the Stores Committee of the Swansea Corporation on September 13 Messrs. Young & Co., London, wrote asking to be relieved of their contract to supply "Chloros." They said:—

With regard to further supplies, we shall be glad if your With regard to further supplies, we shall be glad II your Council will cancel our contract with you, as Messrs. the Portway Co., Ltd., are instructed not to supply us with any more stuff. As we quoted you on the Portway Co.'s price, this has altered the whole matter, because your orders to us have to be sent on to the United Alkali Co. These people charge us much more for the chloros, as well as a much higher rate for carriage, so we lose about 5d. per gallon on the transaction. per gallon on the transaction.

It was explained that the United Alkali Co. made the disinfectant and that the Portway Co. were the selling agents, whilst Messrs. Young & Co. made the contract with the Corporation. The committee decided that as the contracts had been made for a year they could not now

release Messrs. Young & Co. of their obligation.

At a special meeting of the Holborn Board of Guardians on September 6, six tenders for the supply of drugs to the various dispensaries of the Union were considered. The contract was for twelve months, and the tenders were based upon a schedule prepared for the Board. Messrs. Hodgkinson, Prestons & King offered to supply at 37½ per cent. discount off the schedule prices, Burgoyne, Burbidges & Contract Towns of the schedule prices, Burgoyne, Burbidges & Co. at 22 per cent. off, Corbyn, Stacey & Co. at 37½ per cent. off, Baiss Brothers & Stevenson at 35 per cent. off, C. J. Hewlett & Sons at 40 per cent. off, and Manners & Hopkinson at $41\frac{1}{4}$ per cent. off. Mr. Eade moved that Corbyn's have the contract. They had not the lowest tender, but they had served the Board well. Mr. Miller said so also had the present contractors, Messrs. Manners & Hopkinson. He moved that their contract be renewed, and in the end the contract was again given to them. Messrs. E. Geraut & Co., of Farringdon Road, E.C., were appointed to supply mineral waters to the various poor-law establishments of the Union for the next twelve months.

New Prem'ses.

A handsome pharmacy was opened on September 9 at 13 Old Street, E.C., by Mr. J. T. Walters, chemist and druggist. It is very attractive, particularly at night, for the three large lamps outside show up the expansive

marbled fascia to great effect. The fittings (for which Messrs. Hilton & Roberts, of Celtic Works, N., are responsible) are of carved mahogany throughout, and the interior arrangement is simple, but quite effective and in good taste.

After twenty years' occupancy of premises in the Park Hall Buildings, Cardiff, Mr. Jesse Williams, chemist and druggist, has removed to 132 Queen Street. The new shop has a frontage of 17 feet, but by setting the window back 5 feet and fixing show-cases on the abutting walls Mr. Williams has secured 20 lineal feet of glass for show purposes. The design of the window is unique. It is of bow shape with a domed top, from which radiate twelve bevelled plates. The length of the shop is 72 feet, and is divided into three portions, the first being the sales department, next the cash office, and then the dispensing department. The latter is lighted partly from the roof. Mr. Williams has put in a fireproof floor, consisting of cement laid on steel girders and covered with wooden blocks in imitation of parquetry. Upstairs is a show-room for the display of surgical requisites. The window casements and other fittings were provided by Messrs. S. Maw Son & Sons and by Messrs. Sage & Co., of London. The premises are lighted throughout by electricity.

Cricket.

Leicester and Leicestershire Chemists' C.C. v. Leicester St. Mary's.—Played at Leicester on August 24. The chemists could only manage to make 63 to their opponents' 158, thus losing heavily. Huzzard for the chemists took 4 wickets for 25.

Leicester and Leicestershire Chemists' C.C. v. Stoughton. Played at Stoughton on August 31. Batting first, Stoughton made 58, to which the chemists replied with 30 only. For the chemists Chawner took four wickets for 18 and Marfitt

six for 38.

Leicester and Leicestershire Chemists' C.C. v. Nottingham Chemists' C.C.—The Nottingham Chemists, on their first visit to their Leicester confrères in the rôle of friendly rivals on September 7, were accorded a most hearty welcome, for the Leicester club had resolved to entertain their near neighbours right royally. The match ended in a sweeping victory for the home side, for the Nottingham "lambs" could not stand against the deadly bowling of Miles and Marfitt, the former taking six wickets at very little cost. The scores were: Leicester, 92; Nottingham, 42. After the match the teams and friends sat down to tea, under the chairmanship of the President of the Leicester Chemists' Association (Mr. Walter Rowe), and seats were

reserved for the party afterwards at the Palace of Varieties.

The Sheffield Pharmacy Athletic Club met a team of Poor-law officers arranged by Mr. Antcliffe, Sheffield Union dispenser, on Thursday, September 7, at the Children's Homes Headquarters, and gave them a handsome drubbing. The pharmacists were captained by Mr. C. H. Twelves, and reached 109 before the last wicket fell. Their opponents only got 46 for eight wickets. One of the opponents being seen casting a jaundiced eye over the names of the pharmacists' team, it was explained that each one of them was either a chemist, chemist's assistant, or connected with chemistry. A little inquiry showed that one was a chemistry master at a local grammar school! The Poor-law officers' team included five medical men and one pharmacist. Tea was afterwards provided by the Superintendent of the Children's Homes.

Football.

The Newcastle Pharmacy Football Club opened their programme for the season with a visit to Ryton on Wednesday, September 13, under the auspices of the Tyneside League. Ryton kicked off in the presence of a fair number of spectators, and almost immediately the Pharmacy outside left was hurt and had to retire, the chemists playing only ten men for the remainder of the game. Despite this, they more than held their own, and wate unlucky to be in arrears at the interval, goals being scored by Hardy and Thompson for Ryton; while Elliott, after several fine attempts, scored for the chemists. In the second half, however, the knights of the pestle were in brilliant form, especially Nelson, who scored three goals in succession, and Elliott among the forwards and Harvey and Coble in the defence. of a hard and interesting game was a win for the chemists by four goals to two.

The Public Health.

The public analyst of Poplar examined last quarter one sample each of glycerin, Gregory's powder, cod-liver oil, and cream of tartar, and found all genuine.

Last quarter there were analysed in Hackney six samples of paregoric. One sample was adulterated to the extent of 102 grains per pint with benzoic acid; no action was taken with respect to this.

Mr. C. Seyler, analyst to the Glamorgan County Council, reports that during the past quarter he has examined samples of tincture of orange, tincture of hyoscyamus, cream of

tartar, and oil of almonds, all being genuine.

In his report Dr. G. C. Clarke, Medical Officer of Health for Walthamstow, states that outfits for early diphtheria and typhoid diagnosis are still kept at the Town Hall, and anti-diphtheritic serum for gratuitous injection for those unable to pay is supplied. Thirty-two bottles of serum were used last year.

In his annual report, Dr. C. W. F. Young, M.O.H. for the Administrative County of Middlesex, states that the methods of disinfection practised by the local authorities in the various districts are generally formalinspraying and fumigation for rooms and steam-disinfecting apparatus (such as the "Equifex") for articles of clothing. These methods are employed at Acton, Edmonton, Feltham, Finchley, Hanwell, Harrow, Hendon, Kingsbury, Southgate, Sunbury, and Willesden. Formalin-spray and sulphur-fumigation are preferred at Friern Barnet, Staines, Uxbridge, Wealdstone, and Wembley. The only places of which details are given at which there are no steam-disinfectors for clothes are Staines (Rural) and Uxbridge. At Southall and Northwood the plan adopted for rooms is to fumigate first with sulphur and then brush over or wash the walls, floors, and ceilings with a solution of chlorinated lime.

Cardiff Pharmaceutical Association.

The third and concluding picnic this season of the members of this Association took place on September 13, when a goodly number journeyed to Taff's Well, a picturesque village lying between the Garth Mountain and the precipice upon which is erected the mediæval residence known as Castell Coch, belonging to the Marquis of Bute. The weather was unsettled and interfered somewhat with the rambles which were anticipated. Tea was partaken of at the Junction Hotel, after which a musical programme was arranged, to which many of the members and their friends contributed.

Poisonous Preparations in Hospital-wards.

At the inquest on the death (briefly referred to in last week's issue) of Maria Young (34) from poisoning by aconiteand-belladonna liniment in St. Bartholomew's Hospital, Mr. Arthur Watkins, the hospital steward, explained that the bed-brackets were quite 3 feet above the mattress. The deceased must have had much difficulty in reaching the bottle, owing to her feeble condition. In cases of patients whose mental condition aroused suspicion all drugs were removed, but there was nothing of the sort in the deceased's case; and as a fact that was the first instance of the kind that had occurred during his ten years' stewardship. to jurors the witness said that in some wards all dangerous drugs or liniments were kept in a cupboard; but the doctors were not agreed as to the safety of the practice, some holding that in the case of, say, two patients named "Barker" and "Baker" mistakes in mixing the bottles were liable to occur. In his opinion there was not the same danger in keeping the drugs over the beds. Meanwhile the matter had been reported to the hospital committee, and they would go into it fully. The jury added to their verdict of suicide by poisoning during temporary insanity caused by pain, a recommendation that medicines and drugs should in all cases be kept removed from the patients. The Coroner said he would forward the suggestion to the committee, but he was satisfied that they would do what was best in the general interests of the hospital.

Irish Mews.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editc...

Pharmaceutical Examinations.

Applications for the undermentioned examinations should be lodged with the Registrar (Mr. Arthur T. Ferrall, 67 Lower Mount Street, Dublin) by 11 a.m. on the respective dates: For the Preliminary examination, on Thursday, September 21; for the Registered Druggist examination, on Tuesday, September 26; for the Pharmaceutical Licence examination, on Wednesday, September 27; and for the Pharmaceutical Assistant examination, on Monday, October 2.

Chemists' and Druggists' Society of Ireland.

It is expected that a new President, in the room of the late Sir James Haslett, will be elected on Tuesday next at a meeting called for this purpose. Local members are requested to note that the new rooms will be opened on Thursday of next week.

L.G.B. Refusals.

The Local Government Board have refused to allow recoupment to the Limerick Board of Guardians for a number of items, including 6s. 10d. for drugs, etc., which are

authorised for use in workhouse hospitals only.

The Local Government Board have written to the Naas Board of Guardians refusing to allow recoupment of an item of 6l. 8s. in respect of medicines supplied to Newbridge dispensary district, there being no certificate of analysis received. The Guardians at a subsequent meeting passed a motion to the effect that the L.G.B. be requested to reinstate the claim for recoupment of the sum of 6l. 8s. struck out, the absence of the analyst's certificate respecting the samples being purely accidental. The Guardians point out that the regulations with regard to medicines have always been strictly complied with, and they trust that, in view of the exceptional circumstances under which the analyst's certificate is missing in this case, the L.G.B. will not act so arbitrarily as to deprive the Union of recoupment in respect of the medicines in question.

Fire.

A serious fire which occurred in Larne on September 9 did some damage to the premises of Messrs. Goodwin & Carleton, pharmaceutical chemists, Dunluce Street. The outbreak occurred in a neighbouring drapery establishment and the flames spread to Mr. Carleton's pharmacy, which is one of the finest shops in the town. The front of the building suffered severely from heat. Two drapery establishments were practically destroyed, but the damage done to the pharmacy was not great.

Scotch Rews.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Public Notice.

Robert John Smith Blackwood, chemist and druggist, 64 St. George's Road and 90 Cowcaddens, Glasgow, has signed a deed of arrangement, and the sheriff has ordered creditors who do not concur in the same to lodge a notice of appearance in the hands of the clerk of court within ten days.

The Chemist and the Judge.

A sale of work in connection with Girthon Parish Church was opened at the Town Hall, Gatehouse, on September 9 by Lord Ardwall. The vote of thanks to his Lordship for performing the opening ceremony was proposed by Mr. G. M. Stark, chemist and druggist, who in the course of his speech said he had a grievance against his Lordship in connection with one of his recent decisions. He was much afraid that decision had destroyed his business in Bile Beans. This sally was received with loud laughter, in which Lord Ardwall heartily joined.

Whale Oil from the Hebrides.

During the past year a whaling industry of considerable importance has sprung up at West Loch Tarbert. in Harris, but it is entirely in the hands of Norwegians. The in-

Mr. Vice-Consul Brights, of Gioia, Tauro, in his annual report on that district for 1904 states that "essences of orange and bergamotte maintained their quality and price, but lemon essences were sold at a price which could only be called derisive."

dustry is said to be proving very profitable. Every part of the whale is turned to account, though the oil is the chief source of profit. All the workers, with the exception of the manager, are ignorant of English, and the whaling station is quite a little foreign town. This is one of the results of the recent decision of the Storthing prohibiting whaling off the coasts of Norway.

No Brandy to be Had.

The "Glasgow Evening News" of September 11 tells how a Burntisland doctor last Sunday prescribed brandy and water to be given to a baby who was in a precarious condition, and as places licensed to sell intoxicating liquor are closed on Sundays the doctor gave the father a written order for it. The licensed retailer refused to supply the brandy until the order was endorsed by the police-sergeant, and the sergeant refused to endorse it until the medical officer of health did so, but that officer was not at home. At length the Procurator-Fiscal signed the order, the brandy was obtained, and the child died two hours later. The whole circumstances of the case have been reported to the Chief Constable for the county and to the Medical Defence Union, London. The report does not say what the Union have to do with the matter.

The Bile Beans Founders.

In his recent judgment Lord Ardwall put very pithily the starting of the Bile Bean business, which was not included in the purely legal report of the judgment in the C. & D., but may now be given. It was as follows:

In 1896 the complainer, Mr. Gilbert (who must then have been only twenty-one years of age, and who had been born in England), was in business in New South Wales in connection with a stationery or printing business. He had no knowledge whatever of chemistry or medicine, but he happened to get introduced to the other complainer, Charles Edward Fulford, who was a Canadian by birth, and who is not a qualified chemist, but who had served five years as a shopman in a chemist's shop in Canada, and who further had been connected with the business of a medicine company. It occurred to Fulford that it might be a good thing to carry on business as medicine and pill manufacturers or agents, and he and Gilbert agreed to go into partnership for that purpose. They first started the preparation of Gould's Tiny Tonic Pills, but they did not have such success in that business as they expected. In the early part of November 1899 Fulford told his partner that at four o'clock in the morning he had hit upon a title for a new pill that was to be put upon the market, namely, "Bile Beans for Biliousness," and he prescribed a formula for the pill. The pill took in Australia, and in 1899 Fulford proceeded to this country to open a market in England.

The decision in this case has created special interest amongst Dundee chemists, and the Forfarshire and District Chemists' Association has reprinted for the use of members copy of advertisement and correspondence presented in evidence to the Court of Session in Edinburgh, on July 13, by Mr. William Cummings, Dundee. This refers to the "Cheeky Imposition" advertisement in the Dundee "Evening Post," May 6 and 7, 1902.

French Rews.

(From our Paris Correspondent.)

LEGION OF HONOUR.—M. Paul Adam, who was recently nominated Chevalier, is the well-known professor of the Alfort School who represents veterinary pharmacy on the French Committee for the Revision of the Codex. Dr. Barbin, who received the Red Ribbon at the same time, was formerly a pharmaceutical interne (house pharmacist) in a Parisian hospital.

A Fatal Quarrel.—Emile Berthe, son of an Orleans pharmacist, came to Paris recently with the intention of purchasing a business. He put up at an hotel here in the rue Debelleyne, and there formed acquaintance with two brothers, named Serres. A dispute cccurred between the young men a few days ago, and Urbain Serres discharged the five chambers of his revolver at Berthe. The latter was

carried to the Hôtel Dieu Hospital badly wounded, and died there the next day. His murderer is under arrest.

VIOLET RIBBON DECORATIONS were measured out by yards to the Pharmacy School and Mixed Faculties recently. The new officers of public instruction are: Assistant Professors Grimbert, Guerbet, and Guéran of the Paris Superior School, Professors Arnaud and Laget, of Marseilles, Professors Rollet, Condamin, and Barral, of Lyons, Professors Charmeil, of Lille, Gosselin, of Caen, Parigot, of Dijon, Perriol, of Grenoble, etc.; while the Officers of Academy include Assistant Professor Astruc, of the Montpellier Superior School of Pharmacy; Professors Beylot (of the Bordeaux Mixed Faculty), Mally (of Clermont), Michaud (of Dijon), Simon (of Reims), Assistant Professor Chatav (of the Lyons Mixed Faculty), Patoir (of Lille), MM. Haubert and Thibault (preparators at the Paris Superior School of Pharmacy).

Over the Frontier.—A professor of the University of Nancy writes on the paucity of scientific works in French libraries and the difficulty of obtaining the same. "How is it," he asks, "that the great Parisian libraries (Nationale, Mazarine, Museum, St.-Geneviève) refuse to lend to provincial libraries? The provincial professors who cannot go to Paris have an extraordinary way of procuring books. This means, which I and many of my colleagues have, unhappily, had frequently to adopt, is to borrow the books from the once French library of Strasbourg University. The administration of the library is extremely obliging, lending the works for a month without other formalities than the payment of cost of carriage." The fact of French professors borrowing scientific books in Germany is certainly interesting.

An Alarming Explosion.—An explosion took place (utside the premises of M. Viola-Béodan, dealer in chemicals. Place de la Sorbonne, Paris, a few afternoons ago, and created considerable commotion. It appears that one of the shopmen let a bottle of sodium fall on the pavement, which had been recently watered, and, the bottle breaking, a considerable amount of white smoke was the result. Another member of the staff became rather alarmed, and emptied a bucket of water on the broken bottle. Then the sodium took fire, and a loud explosion followed. Some passers-by, who were terrified by this rather alarming though in reality insignificant explosion, rang a neighbouring fire-alarm, and a fire-engine was soon on the scene. A large crowd also assembled, but in due course the firemen and the crowd went their way.

Wedding to the marriage is announced of M. Henri Herissey, hospital pharmacist, with Mademoiselle Louise Chéron. M. Henri Herissey is a collaborator with Professor Bourquelot, the head pharmacist at the Laennec Hospital, who so recently conducted the British Pharmacutical Conference party over his hospital. The wedding took place at Le Neubourg, a pleasant little place in Normandy. The marriage of Dr. Barthelat (briefly mentioned in the C. & D.) was a most brilliant function. The "witnesses" (married equivalents of the English "best man") of the bridegroom were M. Guignard, Director of the School of Pharmacy, and Professor Cornil, of the Faculty of Medicine; those of the bride, her grandfather, M. Tinarran, and M. Fallières, President of the Senate, the highest official personage in France except the President of the Republic.

The Recent Cholera Scare here has naturally induced the French reporter to make his usual visit to the Institut Pasteur, and to interview Dr. Metchnikoff, apostle of hygiene and longevity, whom he found busy dissecting an anthropoid ape which had died from an inoculation of the disease which the savant is now specially studying (syphilis). Cholera, Dr. Metchnikoff insisted, is not a disease which can be transmitted by inoculation. The bacillus enters by the mouth. Strict buccal hygiene is therefore the best preventive. The mouth should be frequently washed with weak solutions of sulphate of copper, chlorinated lime, corrosive sublimate, and particularly before meals. [This may have been said "sarkastik."—Ed.] Only warm cooked food should be caten, and bread placed in the kitchen oven a few moments to kill any germs which might be on the outside crust. Finally, boiled water should be drunk. Raw fruit and raw vegetables should be avoided.

South African Mews.

(From our own Correspondents.)

Note.—"The Chemist and Druggist" is regularly supplied by order to all the members of all the Pharmaceutical Societies in British South Africa, viz.:

South African Pharmaceutical Association.
Pharmaceutical Society of Cape Colony.
Natal Pharmaceutical Society.
Transvaal Pharmaceutical Society.
Rhodesia Pharmaceutical Society.
Northern District Chemists' Association.
Pharmaceutical Society of Orange River Colony.

Cape Colony.

DRUG AND CHEMICAL IMPORTS.—The imports of drugs and chemicals into Cape Colony during the six months ended June 30 amounted in value to 130,000%, against 134,000% for the six months of 1904.

Half-holiday Cases.—The prosecutions of several chemists which were threatened by the police in one of the suburbs of Cape Town, for contraventions of the Half-holiday Act, 1905, have, we understand, been withdrawn. The authorities decided upon this course after considering the conditions under which the purchases were made upon which the proceedings would have been based.

"Lysol" Poisoning.—At Port Elizabeth on August 16, an inquest was held regarding the death of Julius Moller (61), European, at the Provincial Hospital, on August 14. The evidence of Mr. Isaac L. Dredge, chemist, Queen Street, Mr. John P. Green, assistant to Messrs. Lennon & Co., Ltd., Main Street, and Dr. Byrne showed that deceased was in the habit of using "Lysol." He had a suicidal tendency and had drunk that preparation on August 11, when he was removed to the hospital. A verdict was returned accordingly

No Penalty Clause.—At Victoria West on August 15, Dr. W. B. Bidenkap, of Loxton, was charged with contravening the Licences and Stamps Act by practising the profession of a chemist without a licence. The Distributor of Stamps stated that Dr. Bidenkap was a duly licensed medical practitioner, and as such it was incumbent on him, if he dispensed his own medicines, to take out a licence under Section 7, Act 7 of 1899. This he had refused to do. He was subsequently asked to take out a chemist's licence. This he also declined to do. After hearing evidence and Mr. Scholtz for the defence the Magistrate held that the charge had not been proved, but refused expenses, saying that Dr. Bidenkap had only himself to blame for his appearance there. An honourable man would have complied with the

CHEMISTS AND GENERAL DEALERS IN CAPE COLONY.—The chief interest in matters pharmaceutical in Cape Town during August has been centred in the action brought by the Crown against Messrs. Heynes, Mathew & Co., of Adderley Street. For the benefit of English readers, it may be explained that the licensing laws at the Cape differ considerably from those in force at home. Before being allowed to open a store, ordinary tradesmen in every class of retail business require a general dealer's licence, costing 3l. per annum. Chiefly for the benefit of those living in country districts, where there is no chemist, a general dealer is allowed to sell patent, homœopathic, and Dutch medicines in addition to his general class of goods. Chemists before commencing business are required to have a chemist and druggist's licence, costing 5l. Hitherto it has been considered by the trade that the chemist's licence covers all dealings secured by that of the general dealer's, as well as the ordinary business of a chemist. Hence the usual side-lines, such as toilet-requisites, photographic materials, tobacco, etc., have been retailed by Colonial chemists under their own licence. In some of the country districts an even wider range of goods has been dealt in, including stationery, books and periodicals, and walking-sticks. A few weeks ago a chemist in the Eastern Province of the Colony was summoned for the sale of playing-cards and other articles of a similar nature, he not being in possession of a general dealer's licence. The local Magistrate decided that an offence had been committed, and imposed a nominal

penalty. This decision has apparently roused the authorities in Cape Town, to whom an appeal against the decision was addressed by the Secretary to the Pharmacy Board, on the ground that a chemist's licence allowed of such sales, In consequence of the divergent opinions of the authorities and the Board, the Treasury, as a test-case, have instituted proceedings against Messrs. Heynes, Mathew & Co. for the sale of a "Brownie" film. It will be seen from the report which is subjoined that the defendant firm have been convicted, but, understanding that an appeal is to be lodged in the Supreme Court, the Magistrate imposed the nominal fine of a shilling on each of the three defendants. The decision, if confirmed, will press rather hardly on Cape chemists, particularly on those firms having a number of branches, as two licences—namely, a chemist and druggist's and a general dealer's, costing together 81, annuallybe required for every retail establishment. There being some hundreds of these in the Colony, the revenue will no doubt benefit to a considerable extent by the chemists' misfortune. A special meeting of the Local Pharmaceutical Society will be held in a few days (our correspondent wrote on August 22), when the case will be discussed, and particulars given as to the appeal which is being made to the higher Court. The Society will probably invite concerted action on the part of its members and Colonial chemists generally, in a protest to the Government against the attitude the Treasury has taken up towards the trade. The report of the hearing is as follows:

At the First Criminal Court, Cape Town, on August 21, before Mr. C. W. Broers, A.R.M., John Alfred Mathew, Alfred Harfield Mathew, and Frank Carleton Mathew, trading at 17 Adderley Street as Heynes, Mathew & Co., were summoned for contravening Section 2, Act 13 of 1870, and Section 2, Act 38 of 1887, or one or other of the said Acts, "in that they did all and each, or one or more of them, on or about August 4, and at Cape Town, wrongfully and unlawfully exercise the trade of a general dealer at the said premises without having taken out the necessary licence on that behalf as required by Schedule 2, Act 38 of 1887." Inspector George Clark appeared for the Crown, and Advoeate Russell represented the defendants.

The evidence led went to show that it had been decided by the Treasury Department to test whether a chemist's licence entitles its possessor to sell miscellaneous goods. Mr. John Baubell Pewtress, acting for the Treasury, had purchased a film from the defendants' shop at the corner of Longmarket Street. It was a photographic film. Witness spoke to Mr. Alfred Mathew, and informed him why the film had been purchased. Witness informed him that he intended to test whether he (accused) required a general dealer's licence for the sale of such articles. In reply to Mr. Russell, witness said he had not seen the correspondence that passed between Heynes, Mathew & Co. and the Colonial Office. He knew the book of rules and regulations relating to licences. He was not aware of any prosecution of chemists under the Act before this year.

before this year.

Ernest Wilfred Pemberton, clerk in the Treasury, produced the licence register, showing that the firm held an apothecary's licence. He knew the premises, articles being exposed for sale in the windows. He had seen cameras in the shop.

sale in the windows. He had seen cameras in the shop.

This closed the case for the prosecution, and for the defence
Mr. Russell called John Alfred Mathew, one of the accused,
who said he is a chemist and druggist in Cape Town, and
produced his licence for the present year. Witness was
licensed in 1858 as a chemist. He had practised as a chemist
since then, and still does so. Photographic materials are
included in "sundries." There is no limit as to what chemists
sold. In country districts they have a wider range, and have
to sell more sundries to make a living, as doctors there generally dispense their own medicines. General dealers sell
certain proprietary medicines, The Act of 1887 had not made
any difference to the chemist's business. Up to recently
chemists and druggists were the only people who sold photographic materials.

Alfred Harfield Mathew gave corroborative evidence. Up till a short time ago chemists were the only dealers in photographic requisites.

Mr. Petersen also corroborated. He has been a chemist since 1875, and has sold many things which are not medicines. Mr. Darroll gave evidence of the practice in England. There is no chemist's licence there, but it is customary to sell photographic requisites, and many other things besides chemicals.

chemicals.

A. W. Dockrall, of the Colonial Pharmacy Board, produced a circular which he had written to the Colonial Office, and a reply covering the opinion of the Attorney-General that the decision in the Macdonald case must stand as long as the decision is not reversed, or until the law is altered.

John Clayton Smith, qualified chemist, employed as manager of the British Dispensary, belonging to the defendant firm, said he sold the roll of films in question. Chemists habitually sell photographic goods, and the price-list produced, containing among other headings "photographic materials," was issued by Heynes, Mathew & Co.

In addressing the Court, Inspector Clark drew attention to the fact that under the Act, if the defendants sold photographic goods without taking out a general dealer's hience, they were liable to be proceeded against. He quoted a judgment of the Judge-President of the Eastern Districts Court, in which Mr. Justice Sheil concurred, in the case of Rex v.

in which Mr. Justice Sheil concurred, in the case of Rex v. Macdonald, in which a chemist was summoned for selling playing-cards, tobacco, etc., and in which the conviction was

playing-cards, tobacco, etc., and in which the conviction was upheld.

In representing the case for the defence, Advocate Russell touched upon the fact that the definition of what is termed a general dealer is extremely wide, and yet only 3l. is paid for the licence. He did not agree with the judgment of the Eastern Districts Court, nor that two licences are necessary in such a case as the one before the Court. The question before the Court was as to whether photographic goods or suchlike article fall within the scope of the licence granted to an apothecary or a chemist and druggist. He pointed out at some length that the various Acts between 1828 and 1877 affecting chemists explicitly stated that their licence should cover all dealing, as such, as well as all dealings covered under a retail shop licence, and also that the articles mentioned within the summons were within the meaning of chemical goods, as the whole art of photography is dependent on chemical reactions. If chemists and druggists were tied down to their one particular trade, there would be nothing left for them to do, and they would be unable to exist. He further contended that the interpretation might be that the chemist's licence, for which was paid 5l., was intended to cover a granted dealer because if the license in the contended to the cover a granted dealer because if the license intended to cover a granted dealer because if the license intended to cover a granted dealer because if the license intended to cover a granted dealer because if the license intended to cover a granted dealer because if the license intended to cover a granted dealer because if the license intended to cover a granted dealer because if the license intended to cover a granted dealer because if the license intended to cover a granted dealer because if the license intended to cover a granted dealer because if the license intended to cover a granted dealer because if the license intended to cover a granted dealer because intended to cover a granted to a cover a granted t contended that the interpretation might be that the chemist's licence, for which was paid 5l., was intended to cover a general dealer, because if the price of the general dealer's licence (3l.), and the doctor's licence to prescribe and disperse medicines and sell surgical appliances and sundries (2l. 10s.), were added together, the Court would find that both only exceeded the amount of the licence paid by an apothecary, chemist and druggist, by 10s.

Mr. Brown said the defendants were summoned for calling

Mr. Broers said the defendants were summoned for selling Mr. Broers said the defendants were summoned for selling goods without taking out a genoral dealer's licence. Ho would admit that up to the time the case of Macdonald was decided in the Eastern Districts Court he was under the impression that a chemist's licence included these things, but then he had never referred to the Act. After seeing the judgment and carefully studying the Act, he considered there is no doubt that they are required to take out a general dealer's licence if they wish to dispose of goods other than those specifically connected with their profession. The ordinary interpretation of a chemist and druggist is one who compounds specifically connected with their profession. The ordinary interpretation of a chemist and druggist is one who compounds drugs and medicines, but the question of other goods or materials did not come under the term "as such" so specifically mentioned in the Act. After referring to the different section mentioned in the Act, he had come to the conclusion that to sell any other goods a general dealer's licence is required. He found all the accused guilty of carrying on a business other than their own without having the necessary licence. He understood that this was merely a test-case, and He understood that this was merely a test-case, and would in all probability be taken to the Supreme Court, and he therefore thought that a nominal penalty only would be necessary. He would order that each of the defendants should

pay a fine of 1s. An appeal was noted.

Natal

NATAL PHARMACEUTICAL SOCIETY.—The monthly meeting of this Society was held in Durban on August 17. were present Messrs. Champion, T. Charlton, N. Charlton, Fernie, Firth, Holden, Irving, Johnston, Milne, Morillion, Thomas, Read, Roadknight, five visitors, and the Hon. Secretary (Mr. D. S. B. Anderson). Mr. Fleming Johnston (President of the Society) occupied the chair. Dissense in technical contents of the contents of the chair. cussion took place anent the somewhat irregular manner in which the list of qualifications attached to chemists' names in the register was kept by the Government. It was resolved

That the Natal Pharmacy Board be requested to place various qualifications of registered chemists on the

The main feature of the meeting was a lecture by Mr. G. A. Champion (ex-President of the Society) on "Pharmacy in South Africa, Past and Present." The lecture proved extremely interesting and was greatly appreciated, coming as it did from so experienced and able a pharmacist as the ex-President. We hope to publish a résumé of the lecture.

Orange River Colony.

THE MEDICAL AND PHARMACY COUNCIL has completed the arduous work of framing regulations under Section 11 of the 1904 Ordinance, and they were formally gazetted in an extraordinary issue of the "Government Gazette" on August 5. First the meetings and proceedings of the Council itself are dealt with, then the details for registration as a medical practitioner or dentist. As to chemists and druggists, persons holding the certificates of the Pharmaceutical practitioner or dentist. Societies of Great Britain and Ireland will be registered on proof of identity, also those holding the examination certificate of the Colonial [Cape] Pharmacy Board and Natal Pharmacy Board, if obtained prior to August 5, 1905. All other persons must pass the examinations instituted by the Council. The conditions in the last case are that the applicant shall have passed an examination including English, Latin and arithmetic (the preliminary examination of the Pharmaceutical Society of Great Britain and the School Higher examination of the Cape University being amongst those recognised); further, the candidate must produce evidence of having served an apprenticeship of three years to a registered chemist and druggist, or having otherwise for three years been engaged in the Colony in compounding and dispensing medical prescriptions; he must be 21 years of age, and shall pass an examination in botany, chemistry and physics, materia medica, pharmacy and dispensing and prescription-reading. The syllabus of this is substantially that of the Minor examination. The examination will be held in February and August, fee 5l. 5s., or a special examination can be had for 15l. 15s. The regulations also deal with the registration of nurses and midwives and the sale of poisons (see p. 465). The Pharmaceutical Society of the Colony met. on August 22 to discuss the regulations, and we hope to report the result in an early issue.

Transvaal.

OPIUM-IMPORT.—At a meeting of the Transvaal Legislative Council at Pretoria, on September 6, Sir George Farrar moved the adjournment in order to draw attention to the enormous quantity of opium being imported into the country, as revealed by the statement of the Colonial Secretary, and urged that measures should be taken for the immediate stopping of the traffic. Others besides chemists, he said, were extensively importing the drug.

PRETORIA MEDICAL SOCIETY.—At a meeting of this Society held on August 18, the proposed amendment of the Medical, Dental, and Pharmacy Ordinance was discussed. Dr. Kay, who presided, reviewed the representations made to the Government by the Medical Council and Pharmacy Board protesting against any alteration of the law. He said the Colonial Secretary had told the deputation (which consisted to the Colonial Secretary had told the deputation (which consisted to the Medical Council Medical Medical Council Medical Me of Dr. Kay, Acting-President of the Medical Council, Mr. J. H. Dinwoodie, President of the Pharmacy Board, and Mr. J. R. Jones, Government nominee on the Pharmacy Board) that the cause of the proposed amendment was the number of petitions presented to the High Commissioner and the Government praying for greater facilities for the purchase of medicines by farmers living in the outlying districts. It had been agreed that the amendment should protect chemists, so far that the sale of poisons within municipal areas should be restricted to chemists, and that all persons selling poisons in country districts should be compelled to keep a register for the sale of all poisons, such register to be under the inspection of the police. The members of the Pharmacy Board present had to be satisfied with that promise. The second reading of the proposed amendment had now been passed, and, as the law now stood, any storekeepers, within and without municipal areas, were allowed to sell poisons. The Colonial Secretary did move an amendment to prevent the sale of medicines containing poisons in municipal areas, except by chemists, which proposed amendment was lost; but all knew that the Government could carry any point if it chose. The inference was, said Dr. Kay, that the Government never meant to keep the promisemade to the delegates of the Council and the Board. He protested against the representations of the Council being, ignored, and said he believed the Pharmacy Board had petitioned the Legislative Council to postpone the third reading. It was decided to request the Lieut.-Governor to receive a deputation which would propose the postponement of the amendment.

India and the East.

(News from onr own Correspondents.)



A SNAP-SHOT IN KARACHI.

The business premises of Mr. J. Bliss, Wholesale and Retail Chemist and Druggist, Elphinstone Street.

THE STRAITS PHARMACEUTICAL ASSOCIATION is now fully formed at Singapore, with branches at Penang and Kuala Lumpur, and has been recognised by the Straits Government. Mr. J. McKenzie has been appointed President, and the duties of Hon. Secretary and Treasurer devolve upon Mr. R. T. Christopher. One of the first duties of the Association will be to approach the Principal Civil Medical Officer, and get several knotty points in the Poison Ordinance settled.

WILL HE NO COME BACK AGAIN?—On August 12 the newly formed Straits Pharmaceutical Association gave a dinner at Raffles' Hotel, Singapore, to Mr. A. MacIntosh Stewart, who has been manager of the British Dispensary for the past four years, and is now going home for a well-earned holiday. Among those present were Messrs. J. McKenzie, Geo. Whyte Crawford, R. T. Christopher, J. Turner, and H. J. M. Ellis (of Ellis & Co.). Full justice was done to the excellent menu, and the playing of Scotch music by the band of Russel's Infantry was much appreciated. Mr. McKenzie, the doyen of chemists in Singapore (though still comparatively young), in a few well-chosen words remarked on the complete harmony that existed in the Settlement between members of the craft, and in the name of the Association wished Mr. Stewart a good voyage, good health, and future prosperity. After dinner the company was considerably augmented by a number of Mr. Stewart's other friends, and a most enjoyable evening was spent. It is understood that Mr. Stewart will shortly revisit the Straits, representing several well-known drug and sundries houses.

Poisons in Ceylon.—At a meeting of the Colombo Municipal Council on August 11, the draft regulations regarding the sale of poisons were considered. The following were particularly discussed:

It shall not be lawful for any person not being an apothecary, chemist, druggist, or registered medical practitioner to possess or keep for sale any poison upon any premises where any article whatsoever is kept or exposed for purposes of sale, unless such person holds a licence issued under Section 4 of Ordinance 11 of 1901. It shall be lawful for any officer of police not below the rank of inspector, korale, muhandiram, or udayar to enter upon any premises when any article whatever is kept or exposed for sale or sold or offered for sale, and to search for

It shall be lawful for any officer of police not below the rank of inspector, korale, muhandiram, or udayar to enter upon any premises when any article whatever is kept or exposed for sale or sold or offered for sale, and to search for and seize any poison or inspect poison, and to remove the same for the purpose of identification of the article. The burden of proof that any poison found upon any such premises was not intended for sale shall rest with the person in whose possession the poison is found.

Mr. Perera, Mr. Peris, and Dr. Perry having commented adversely on the matter, Mr. Cooper moved that the draft regulations be referred back to the medical officer of health, informing him that they were not likely to be of any help whatever for the purpose intended. Dr. Perry seconded, and this was agreed to.

Colonial and Foreign News.

Dr. D. CAYETANO DE MAYOLAS Y DE ROURA died recently. He was one of the governing committee of the Barcelona College, and was Director of the Laboratory of the Spanish Pharmaceutical Society.

NEW MEXICAN PHARMACOPŒIA.—The Hygienic Council of the State of Nuevo Leon of Mexico says the new Mexican Pharmacopœia is smaller, as a large number of obsolete medicines have been dropped out. The Pharmacopœia is printed in Spanish, and it contains a large number of native products and drugs in common use as domestic remedies.

CLOUDY AMMONIA IN U.S.A.—A certificate of incorporation of Scrubb & Co., Ltd., has been filed in Albany. This is to be a branch of the English company of the same name. Its headquarters will be in Brooklyn and nearly all of its directors are Brooklyn men. The company will manufacture household preparations, and will also purchase, manufacture, sell and deal in drugs, oil, chemicals, dys-stuffs, druggists' sundries, surgical instruments, physicians' and hospital supplies, and will carry on the business of chemists and druggists. The capital stock of the company is to be \$150,000.

Canadian Wholesalers' Combine.—Further particulars of this movement point to the fact that its inception originated among some of the leading firms composing the Canadian Wholesale Druggists' Association. Measures have been taken to ascertain whether such a project might be assured of success if promulgated generally among wholesalers. The company, if formed, will be composed of about a dozen wholesale drug-houses, and the capital stock is placed at \$6,000,000. The main object of the combine is stated to be a desire to stop the keen and ruinous competition existing between Canadian drug-houses. The actuality of the combine is as yet, however, quite problematical.

Russian Notes.—The Minister of the Interior has just laid his hand upon numerous professional leagues recently formed, including pharmacists' leagues, and has declared them to be criminal. The responsible persons are to be prosecuted.—A group of chemists' assistants are to open a co-operative pharmacy in St. Petersburg shortly. This will be the first of the kind in the country. The required capital is to be raised by the issue of ten shares of 120% each.—Trampedach & Co., chemical manufacturers, finished their seventh year (1904) with a loss of 54,615 roubles, compared with a loss of 119,305 roubles in 1903.—The "Pharmatzevtitcheski Viestnik" states that the Suboff pharmacy was recently acquired by Mr. Levinson for 9,000%, and as soon as he entered into possession he commenced to economise by trying to get free labour amongst the Jewish students in the town, who have to be employed in a pharmacy in order that they may acquire the residential rights in Moscow necessary in preparing for their examinations. So far Mr. Levinson has failed to get something for nothing.

Russian Army Pharmacists.—A long article in the "Pharmatzevtitcheski Journal" by Mr. P. K. Birkenfeldt deals with the educational requirements of the pharmacists engaged by the War Department. He details the requirements in the French, German, Italian, Austrian, Belgian, and Dutch armies in that respect, and complains that the Russian service is supplied by the so-called free practising pharmacist who has not served at all in the army, or if he has been in the army, he has generally had previously only the experience of a pharmacist's assistant. Thus in the first case he is unacquainted with the rules of the garrison and the interior service and discipline; and on the other hand, he does not understand pharmacy. The writer then proceeds to show what a military pharmacist in his opinion should be equal to. He should be able to undertake chemico-pharmaceutical and bacteriological analysis, besides having a knowledge of accounts, &c. As the matter stands the War Department has to have recourse to "trained hands," to pharmacists' assistants, and such like. He considers the present education of the Russian pharmacist far too limited to supply efficient service to the army.

American Pharmaceutical Association.

TLANTIC CITY, on the coast of New Jersey, was the A TLANTIC CITT, of the coast of the Merican Pharmaceutical Association, which began its work for the advance of the practice of pharmacy fifty-three years ago. The city is another Brighton, and in this respect the Association is this year on a footing with the British Pharmaceutical Conference in seeking a breezy environment for its brainy work. The public proceedings commenced on Monday, September 4, at 3 P.M., at the Isleworth Hotel, and the following synopsis of the programme indicates how the week was spent:

Monday, September 4.—10 A.M., council meeting; 3 P.M., first general session; 8.30 P.M., reception to the visiting

members.

Tuesday, September 5.—10 a.m., second general session; 3 p.m., meeting of American Conference of Pharmaceutical Faculties; meeting of Association of Boards of Pharmacy; 8 p.m., session of the Section on Historical Pharmacy.

Wednesday, September 6.—10 a.m., session of the Section on Pharmaceutical Education and Legislation; 3 p.m., session of the Section on Pharmaceutical Education and Legislation; 8 p.m., session of the Section on Scientific Papers.

Papers.
Thursday, September 7.—10 A.M., session of the Section on Scientific Papers; 3 P.M., session of the Section on Commercial Interests; 8 P.M., session of the Section on Practical

Pharmacy and Dispensing.

Friday, September 8.—10 A.M., session of the Section on Practical Pharmacy and Dispensing; 3 P.M., installation of officers; 8 P.M., lecture on radium, by Professor Chas. Baskerville.

Saturday, September 9.—10 A.M., final general session.

THE SCIENTIFIC SECTION

was this year presided over by an English pharmacist, Mr. Eustace Harold Gane, pharmaceutical chemist, who is chief of the laboratories of Messrs. McKesson & Robbins, New

York. Mr. Gane was a Bell scholar in 1891, and distinguished himself in the School of Pharmacy, taking silver medals in pharmacy and materia medica, bronze medals in chemistry and materia medica, and the first certificate in botany. After passing the Major examination on July 26, 1902, he obtained the Pharmaceutical Society's silver medal in the annual prize-competition. Mr. Gane stayed on at Bloomsbury Square, working in the research-laboratory and as a demonstrator, until June 1894, when he joined the staff of THE CHEMIST AND DRUGGIST temporarily. While here he was engaged by Messrs. McKesson



MR. E. H. GANE.

& Robbins, with whom he has been since 1895. He is one of the most unassuming of men, but during his ten years' residence in the United States he has been recognised as one of the ablest pharmacists in the A.Ph.A., and his appointment to the chairmanship of the Scientific Section of the Association can only be a prelude to higher office. Mr. Gane had arranged an excellent programme for the Section, which included contributions from Professor Ernst Schmidt, of Marburg, on "Scopolamine," and by Professor Schaer, of Strassburg, on "The Influence of Alkaline Substances upon Oxidation-processes." An address by Mr. Gane opened the proceedings on September 10, and on Friday, September 8, at 8 r.m., Professor Charles Baskerville, of New York, delivered a lecture on "Radium and Radioactivity." We give abstracts of the more important papers which were contributed: which were contributed:

CHEMICAL EXAMINATION OF GRINDELIA. By Frederick B. Power and Frank Tutin. (A contribution from the Wellcome Chemical Research Laboratories.)

Under the title of Grindelia the U.S.P. recognises "dried leaves and flowering tops of Grindelia robusta, Nuttall, or of Grindelia squarrosa (Pursh), Dunal." Although the drug has been used medicinally for a number of years, the chemical examinations which have hitherto been made of it are somewhat incomplete. Rademaker reported the occurrence of an

alkaloid, which Clark could not confirm, but inferred that it contained "saponin or an allied body," for which the name alkaloid, which Clark could not confirm, but inferred that it contained "saponin or an allied body," for which the name of grindelin was suggested. He furthermore considered it probable that the medicinal properties of the grindelias are due to this substance, and advanced the theory that "the resin found in the drug is wholly a decomposition product of grindelin." Fischer has indicated that the most important constituents found by him were a crystallisable acid, soluble in water, alcohol, and ether, which he termed "robustic acid," and an alkaloid which was designated as "grindeline." Schneegans stated that he obtained two glucosides having the characters of saponin, but doubted the presence of an alkaloid. The present authors find that the chief constituents of grindelia are amorphous resins, to which its medicinal value is probably to be attributed. In addition, grindelia contains is probably to be attributed. In addition, grindelia contains a considerable amount of a lævorotatory sugar, apparently l-glucose. It also contains proteid substances, amorphous colouring-matter, and tannin, and an exceedingly small amount of an essential oil, possessing the characteristic odour of the drug. The authors are unable to confirm the observa-tions of previous investigators respecting the presence of a saponin or an alkaloid.

THE CRYSTALLINE ALKALOID OF CALYCANTHUS GLAUCUS. By H. M. Gordin.

In a previous paper (C. & D., 65, 498) the author described the preparation and analysis of ealycanthine and its salts with the halogen acids and chloroplatinic acid. The work with the halogen acids and chloroplatinic acid. The work done since shows that the alkaloid is a secondary base, forming a nitrosamine when treated with nitrous acid. It also contains a methyl group attached to a nitrogen atom. The alkaloid forms a sulphonic acid when treated with strong sulphuric acid, and gives several methyl derivatives when treated with methyl iodide. Of these one is a quaternary base not precipitable by sodium carbonate from the aqueous solution of its salts. The work is to be continued.

CONTRIBUTION TO THE CHEMISTRY OF CHELIDONINE. By J. O. Schlotterbeck and Burton S. Knapp.

By J. O. Schlotterbeck and Burton S. Knapp.

Chelidonine is the principal alkaloid of Chelidonium majus and Stylophorum diphyllum. Its formula is C₂₀H₁₂NO₅,H₂O and melting-point 136°. In the present paper the authors, after stating that the alkaloid contains a hydroxyl group and forms acetyl and benzoyl derivatives, described the action upon it of heat, alkali (by fusion), zine-dust, and phosphorus pentachloride, without coming to any clear deduction except that further work may show a close relationship between chelidonine and sanguinarine, which is also colourless in the free state and bright red in the form of salt.

THREE PAPERS ON ADULTERATION, By L. F. Kebler,

By L. F. Kebler,
were contributed. In the first, speaking of the amount of
adulteration in chemicals, the conclusions come to as regards
the United States were (1) gross and deliberate adulterations
do not amount to 1 per cent.; (2) chemicals that do not comply
with the professed standards under which they are sold,
including all hands except retailers, approximate to 25 per
cent.; (3) published reports indicate that U.S.A. retailers'
chemicals fail to comply with the professed standards under
which they are sold to a larger extent than obtains in all
other countries combined. In his second paper Mr. Kebler
dealt with the importance of procuring representative samples
for analytical work; and in the third the organisation and
working of the drug-laboratory at Washington, D.C., of which
the author is chief, were described. The work includes at
present the fellowing lines of investigation:

Testing of Chemical Reagents.—All chemicals purchased

Testing of Chemical Reagents.—All chemicals purchased by the Burcau of Chemistry are examined to ensure the acceptance of reliable chemicals only, thus placing all competitors on an equal footing, and also for the purpose of securing data from which standards of purity can be con-

Analysis of Plant-drugs.—This involves the study of analytical methods and also of the influence of time on the

analytical methods and also of the influence of time on the properties of many potent drugs.

Cod-liver Oil Investigations.—An investigation of both American and Norwegian cod-liver oils is now being conducted, in collaboration with the Division of Foods and the Bureau of Fisheries, to determine their relative values, chemically and medicinally. Thus far the results indicate that the American oil is equal to the Norwegian.

Work on Proprietary Medicinal Agents.—Much of this work is done at the request of the Post Office Department, to assist it in investigations of fraudulent products which are

assist it in investigations of fraudulent products which are transreitted through the mail.

Compilation of Drug Laws.—All the laws of the different States and territories are now being collected which relate to the adulteration of drugs and medicines or to the labelling of poisons. These will be published in bullctin form for the information of those interested.

A paper allied to this was by Mr. R. H. True on the "Drugplant Investigations of the Department of Agriculture." to which we have previously referred. The field work of the Department includes the working out of practical methods of growing drug-plants and of curing the product.

PINK ROOT.

By W. W. Stockberger.

By W. W. Stockberger.

In this the author gave an historical outline of knowledge of pink root, Spigelia marilandica. The early confusion between this plant and Spigelia anthelmia of the West Indies was referred to, and the fact that the confusion extended to chemical and physiological investigations. Later there was confusion between pink root and Ruellia sp., which still persists and has crept into some recent text-books. Then general substitution is practised. Phlox carolina is erroneously regarded as a considerable adulterant of spigelia owing to confusion of ruellia with phlox. This confusion also extends to chemical work; thus "phloxol" is derived really from ruellia. It is not surprising that spigelia should have taken a less important place in medicine than formerly, since ruellia is relatively inert. relatively inert.

PHARMACOLOGICAL NOTES ON TWO AMERICAN PLANTS.

By A. C. Crawford.

Aqueous extract of Mountain laurel, Kalmia latifolia, given Aqueous extract of Mountain faurei, Kaimia intiforia, given by the mouth increases salivary secretion and causes vomiting, retching, paralysis, and death. The action suggests in some respects the pilocarpine group and the possibility of substitution medicinally. Fluid extract or aqueous extract of Mistletoe, Phoradendron fluvescens, injected directly into the vein of a dog caused marked rise in blood-pressure, with rapid heart-beat and increased urinary action. By mouth the action is uncertain the action is uncertain.

THE CHEMISTRY OF BOCCONIA CORDATA. By J. O. Schlotterbeck and Walter H. Blome.

By J. O. Schlotterbeck and Walter H. Blome. Bocconia cordata, or tree celandine, is a native of Japan, but has been successfully grown in several countries. It was made the subject of investigation by Eijkman, Hopfgartner, and Murrill and Schlotterbeck. The last named found five alkaloids—protopine, β -homochelidonine, chelerythrine, sauguinarine, and a fifth melting at 100°. In the present work 25 kilos. of drug was exhausted and only protopine and β -homochelidonine separated, of which 87 and 85 grams respectively were obtained. β -homochelidonine may be converted into the γ -variety by melting and crystallising from appropriate solvents. Heated with hydrochloric acid in a sealed tube methyl chloride is split off. Other experiments of an inconclusive nature were recorded. an inconclusive nature were recorded.

TECOMA MOLLIS.

By L. F. Kebler and A. Seidell.

This plant is used in Mexico as a remedy, and an examination was made to determine its proximate principles. The plant is also said to be indigenous to Columbia, Peru, and Chili, and to be known by the following synonyms: Tecoma sorbifolia, H. B. K., Tecoma stans y-relutina, DC., Stenolobium molle and Bignonia tecomoides, DC. The leaves were examined by the Dragendorff and Parsons methods, and the results show that Tecoma mollis contains no alkaloid or other well characterised medicinally important plant constituent. It contains, however, a bitter principle soluble in dilute alcohol, to which is probably due whatever medicinal properties the plant may possess. This plant is used in Mexico as a remedy, and an examinaties the plant may possess.

ESTIMATION OF CAFFEINE AND ACETANILIDE. By W. A. Puckner.

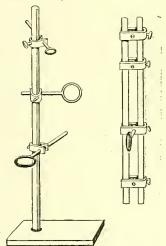
The author estimates acetanilide and caffeine in headache-The author estimates acetanilide and caffeine in headacheremedies by extraction of both from a sulphuric-acid solution by means of chloroform, the chloroform being then distilled off, and the residue dried to obtain caffeine plus acetanilide. From this residue the caffeine is then extracted, precipitated with iodine, the periodide decomposed with sodium sulphite, and the caffeine extracted with chloroform. In a second note the author stated: (a) If caffeine, dried at 95°, is dissolved in water or chloroform, evaporated at room temperature, and dried over sulphuric acid, practically the original weight is obtained. (b) If caffeine, dried at 95°, is dissolved in chloroform, the solvent evaporated from a shallow dish at 50° to 60° and dried at this temperature, practically the original weight form, the solvent evaporated from a shallow dish at 50° to 60° and dried at this temperature, practically the original weight is obtained. (c) From a chloroform solution of caffeine the solvent may be distilled off and the residue dried at 95° without loss of caffeine. If, on the other hand, the solution is contained in a shallow dish, and after evaporation is dried at 95°, an appreciable loss of caffeine occurs. Speaking on the estimation of acetanilide, the author stated that his experiments show that acetanilide is quite volatile at comparatively low temperatures. From its ether or chloroform solutions tively low temperatures. From its ether or chloroform solu-

tion the solvent may be evaporated at room temperature, and tion the solvent may be evaporated at room temperature, and the residue brought to constant weight over sulphuric acid without loss of substance. If the solvent is distilled from a flask and the residue dried at 50° to 60°, loss by volutilisation is slight, and a practically constant weight is attached in from twelve to twenty-four hours. At 95° acctanilide is appreciably volatile, even when contained in a narrow-necked flask. The residue obtained on evaporation of an other or chloroform solution is not pure acetanilide, and if loss by vaporisation is guarded against high results are invariably obtained.

AN IMPROVED RETORT STAND.

By J. P. Remington, jun.

The retort stand consists of an iron base, an upright of wrought iron pipe (1 in.), with a set of ingeniously constructed clamps, into which the shafts of the rings fit and can be securely fastened to the upright at any time and in any posi-tion. The novel feature of this retort stand consists in the construction of clamp, which is shaped like the letter U, with two holes in the ends through which the shafts of the rings are run and fastened securely by a thumb-screw in the curved and of the clamp. The accompanying illustrations show the clamps attached to the upright, and also a modified form of the clamp when used upon horizontal frame laboratory counters.



HEHNER'S TEST FOR FORMALDEHYDE. By A. B. Lyons.

Hehner's test is applicable only to milk or to a mixture of the suspected solution with milk. The milk contains proteids upon the presence of which the colour-reaction depends. In a proposed modification of the test, beef peptone is substituted for the milk. It is essential that there be a correct proportion of the several reagents concerned in the test. In routine work use for the reagent a mixture of tincture of ferric chloride, U.S.P., in 20 to 25 volumes of strong sulphuric acid.

Place in a test-tube 2 c.c. of the solution to be tested (distillate, if necessary). Add 20 m.g. of beef peptone; shake the tube and add with a pipette 2 c.c. of the reagent, allowed to flow down the side of the inclined tube and so form a distinct layer at the bottom. Make a duplicate experiment, allowing one tube to stand for development of colour zone; mix the contents of the other tube by shaking, and observe change of colour.

The test detects 1 part of formaldehyde in 4,000,000.

In a second note the author stated that morphine and sul-In a second note the author stated that morphine and sulphuric acid may be used for detecting formaldehyde. The test applied by the contact method will show hardly less than 1: 20,000 formaldehyde in aqueous solution. Addition to the reagent of a trace of ferric salt (chloride or sulphate) greatly increases its sensitiveness, so that it will give a colour indication at dilution of 1:2,000,000. Other aldehyde bodies, however, react like formaldehyde. In particular, sucrose and lactose may be recognised, though not satisfactorily discriminated, by this reagent. In case of sucrose solutions 1:100 to 1:1,000, the colour is distinctive, the violet blue obtained as from formaldehyde being surmounted by a vellow border from formaldehyde being surmounted by a vellow border. 1:1,000, the colour is distinctive, the violet blue obtained as from formaldehyde being surmounted by a yellow border, the two colours contrasting finely. Obviously morphine, codeine, and heroine may be identified by using formaldehyde or sugar as a reagent, performing the tests exactly as when looking for formaldehyde or sugar. The test for formaldehyde is applicable only to distillates, and then is only of negative value. It cannot be applied to milk (before or after coagulation) neither can it has well to detect glueges in write. coagulation), neither can it be used to detect glucose in urine.

Cutting.—Probably one of the chief reasons why "cutting is so common in all businesses is the case with which anybody, without experience, can "commence business" on credit; this generally means opening a shop in opposition to some other which is doing well, and trying to get its customers away by which is doing well, and trying to get its customers away by selling at prices which leave uo margin for profit. Fortunately, such unfair competition as this cannot last very long; but while it lasts it is a source of loss to the original business and of anxiety to its owner. As regards a remedy, we fear the only hope is that the evil will gradually cure itself by the feeling of the community making such unfair competition impossible. Publishers! Gradual possible .- Publishers' Circular.

Pharmaceutical Society of Ireland.

COUNCIL-MEETING.

THE Council met at 67 Lower Mount Street, Dublin, on Wednesday, September 6, at 3 P.M. The President (Mr. W. F. Wells) was in the chair, and the other members present were the Vice-President (Dr. Walsh) and Messrs. W. Vincent Johnston, John Smith, P. N. White, W. J. Baxter, D. M. Watson, W. Doig, James Michie, G. D. Beggs, Richard Blair, and John Edgar Conner.

THE BRIGHTON CONFERENCE.

The President reported that Mr. Watson and he attended the meeting of the British Pharmaceutical Conference at Brighton, and were very cordially received. The meeting was most successful, and the papers reached a very high standard. From a social point of view there could not have been a better meeting.

THE ELECTIONS.

The President asked the Registrar to state how many of

the retiring members of Council were to seek re-election.

The Registrar said Messrs. Jameson, Conner, Beggs, Wells, White, and Baxter intended to do so.

Messrs. Johnston and Watson were appointed scrutineers of the ballot.

MR. JOHNSTON MONTGOMERY.

The President said he had received a letter from Mr. Johnston Montgomery, stating that it was not his intention to seek re-election as a member of the Council. This was greatly to be regretted, because for many years Mr. Mont-This was gomery had been practically a local President in Belfast, and had looked after their legal matters there in a most efficient manner; so that if he retired from the Council it would be a great loss and they would miss him very much.

Mr. Doig: I think we should ask him to reconsider his decision. He would not be bound to be here every month.

The PRESIDENT: There is not a man in Belfast that we

would more like to have here.

Mr. Beggs seconded Mr. Doig's proposal that Mr. Montgomery be asked to reconsider his decision.

Mr. Baxter suggested that the President should write to him, and he said he would.

CO-OPTION OF MEMBER.

A letter was received from Mr. Patrick Kelly thanking the Council for having appointed him Professor in the School of Chemistry, and resigning his seat on the Council. He thanked the members for the cordiality and kindness he had always experienced at their hands.

The VICE-PRESIDENT moved that Mr. Henry Samuel Misstear, Ph.C., 68 Upper Clanbrassil Street, Dublin, be co-opted to the vacancy caused by Professor Kelly's retire-ment, pointing out that a Dublin member is necessary and desirable so that a quorum may be assured. Mr. Misstear would be able to attend every meeting of the Council. He had worked his way well in pharmacy, and was very deserving of a place on the Council.

Mr. Beggs seconded and Mr. Baxter supported the

motion The President: We have only seven Dublin members on the Council now. We ought to have ten. If our friends in the North would arrange so that one of them would come to one meeting and another to another, it would get us out of the difficulty.

The motion was unanimously agreed to.

AN ULSTER BRANCH SUGGESTED.

A letter was read from Mr. Samuel Hogg, 110 Shankhill Road, Belfast, suggesting (1) that an Ulster branch of the Society should be established in Belfast, and (2) that the subscription for life membership should be reduced from ten guineas to three guineas. Mr. Hogg said that there was a paucity of members of the Society in Belfast and Ulster generally, and he feared that until Belfast received pharmaceutical organisation there was not much hope of any inceutical organisation there was not much hope of any increase of membership there. The branch, he suggested, would be analogous to the North British Branch in Edinburgh. Belfast, he added, is too important a place and too far from headquarters in Dublin to be treated any longer as it had been in the past.

Mr. Johnston: I propose that the letter be marked "read."

The President: The suggestion to establish a branch in Belfast would require a new Act of Parliament. We could not possibly hold examinations there, for our existing Acts lay down where our meetings are to take place and where the examinations are to be held.

Mr. Beggs: You do not propose to treat the letter seriously?

The PRESIDENT: I think we should reply to it. I do not know of any society that gives a life membership for three guineas.

Mr. Doig: As a northern member I have no sympathy with the writer at all. I do not think there is any desire for a branch there. Dublin is not so very far from Belfast. Coming up means to us the loss of a day; but you gentlemen in Dublin lose half a day. As to the reduction of the sub-scription to three guineas, it would mean a very serious

loss to the Society.

It was decided that the Registrar should reply to the letter of Mr. Hogg stating that his suggestions were not feasible.

A GROCER'S FINE.

A letter was received from Mr. Joseph Donnelly, solicitor, informing the Council that William D. Hamilton, grocer, Toberagola, in the county of Antrim, had been fined 5l. and 2s. costs for keeping open shop for the sale of poison (laudanum). Accompanying the letter was a remittance of 3l. 4s. 8d., being two-thirds of the fine less 2s. costs in another summons which was not proceeded with.

The President explained that in the case which was not proceeded with the defendant paid a 5l. fine without going into Court. That course was often adopted by defendants in England on demand made for the penalty; but the Irish Society preferred a public proceeding.

CERTIFICATES CANNOT BE DUPLICATED.

A letter from Mr. Leonard Jennette stated that his certificate of membership was burnt in a fire that recently took place on the premises of J. S. Balmer, Bangor, co. Down, and requested the Council to furnish him with a duplicate certificate. The PRESIDENT said there were great difficulties in the way of complying with that request. The usual course in such cases was to furnish the applicant with a letter. After some discussion it was decided that that should be done.

Thanks were voted for donations from the Editor of The CHEMIST AND DRUGGIST of a copy of "Veterinary Counterpractice," and from the British Pharmaceutical Conference of a copy of their Index.

LICENCE EXAMINATION REGULATIONS.

The President moved the adoption of a series of resolutions amending the regulations for the Licence examination by the insertion of the following provision: "The fee for the examination of each candidate shall be 7s. 6d. to each examiner; but this regulation is not to affect those examiners whose possible term of five years has not expired." Resolutions sanctioning these amendments had already been passed by the Council. The Vice-President seconded the motion, which passed unanimously.

PROPOSED SCHOOL OF PHARMACY.

Mr. VINCENT JOHNSTON moved that the Society should establish a school of pharmacy and that a course at the same should be made compulsory on the students. At the last examination for the licence twenty-two or twenty-three of the candidates failed in pharmacy. One candidate got $2\frac{1}{2}$ grain pills to make up and he made them of 10 grains. At the previous Licence examination the amount shown of bad pharmacy was still greater. Lectures on pharmacy should be given there.

The VICE-PRESIDENT seconded the motion. They were striving to have Pharmacy examinations worthy of the Society. The subject was the one in which their candidates should be best trained; and it would be beginning at the right end to give them a proper class training. If they did not get that, no matter how searching the examination might be, the standard of knowledge would not be raised. It was a mistake to leave them at the haphazard training that they received during their apprenticeship. During three out of the four years of apprenticeship they never

did any dispensing at all. They only got a few months at it, and that might be only in the grooves of a few doctors whereas if they had the proposed school the candidate would be taken over all the things that he was supposed to know.

Mr. CONNER said he did not see any necessity for the proposed school. In the country there were ample opportunities for the teaching of pharmacy; it was even better taught in the country than it was in the city pharmacies, for the students were required to know all branches of the business. If an arrangement were made for classes of this sort in Dublin, apprenticeship would be dispensed with. ("No.") A whole system was not to be condemned because a few fellows would not make up their work.

Mr. Doig said the Belfast School of Pharmacy was a satisfactory one. It would be a hardship to oblige students to come up from the country to take lectures at the proposed

school.

Mr. Baxter said he did not think the mover and seconder of the resolution meant to throw any slur upon the teaching in pharmacy that was given in the country. One young man would pass creditably, while another who had had precisely the same advantages would stick. An apprentice from his pharmacy took first place.

The President: Does "Cork" want to say anything?

Mr. Blair: No; we are satisfied that we are not behind

any place in the Kingdom.

The President said he was sure that neither Mr. Johnston nor the Vice-President meant to insinuate that their friends in the country could not teach their apprentices. His belief was that, as a rule, apprentices were better taught in the provinces than they were in the big cities. In a great many small towns there were good pharmacists who personally taught their apprentices. They knew, unfortunately, that there was a tendency to take apprentices in order to get cheap labour; and there were men who took apprentices in the cities—even in the city of Dublin—but who very rarely saw their apprentices at all. A man should be both able and willing to teach his apprentices; but, unfortunately, it is not say and his helify was that the larger the house the not so; and his belief was that the larger the house the less chance the apprentice had of being taught. He had had some experience of country apprentices, and some of them were tip-top men. In other places they did not get the chance of learning their business. Personally he would like to see established such a school as that which was proposed; but unless attendance at it were made compulsory it could not be worked. No hardship would be involved in it because there were other lectures which the students had to take out. As to doing away with apprenticeship, no such idea was entertained at all. The student would have to serve his four years as before, and attendance at the school lectures would simply be joined on to it.

Mr. MICHIE: You would not give them this teaching

free?

The PRESIDENT: No; we should have to charge them

something.

Mr. Baxter: A young man who came from the country and spent a year or two with you or Mr. Johnston would be better taught than he would be at any school.

Mr. Johnston withdrew his motion. Several reports were then disposed of.

ELECTIONS AND NOMINATIONS.

The following were elected members: The following were elected members:
Mr. Daniel Enright, Millstreet, co. Cork.
Mr. Fawcett Maxwell, Dalkey, Dublin.
Mr. Henry Ramage, Sandymount, Dublin.
Mr. Frank Harley, Bandon.
Mr. Arthur Mayne, Cork.
Mr. Clement Bartholomew Vance, Greystoncs, co. Wicklow.
Mr. William Yeats, Cork.
Mr. William Dunphy, Cork.
Mr. George Alexander Patterson, Passage West, co. Cork.
Mr. Henry Patrick Stack, Cork.
Mr. Joseph Ritchie, Belfast.
Mr. Richard Lames Gorge Dublin, was elected an Associate.

Mr. Richard James Gore, Dublin, was elected an Associate

The following were nominated for membership:

Mr. Samuel Hogg, Belfast.
Mr. William Laird, Dublin.
Mr. William Laird, Dublin.
Mr. William Armstrong Lynass, Belfast.
Mr. Matthew McDonald, Belfast.
Mr. John Mason, Boyle.
Mr. Samuel James Moore, Coleraine.

Mr. John Murphy, Cork.

Mr. Georgo Phillips, Roscommon. Dr. Joseph Terence White, Waterford. Mr. George Henry Batt, Sandymount Road, Dublin.

Mr. George Henry Batt, Sandymount Road, Du Mr. Frederick Garty, Cork. Mr. William Kelly, Buncrana, co. Donegal. Mr. James Mangan, Tralce. Mr. William James Galbraith, Carrickmacross. Mr. Patrick Cagney, Cork. Mr. George Grahame Fetherston, Dublin. Mr. John Joseph McMahon, Limerick. Mr. James Hunter, Blackrock, Dublin.

Other matters having been disposed of, the Council adiourned.

Photographic Salon.

HE annual exhibition of the Linked Ring is held this year in the gallery of the Royal Society of Painters in Water-Colours, 5a Pall Mall East, S.W. The change of venue is justified, for a better-lighted room and a much brighter ensemble has been secured. The Ring has all the aggressive attributes of the Whistlers and Joseph Pennells of the—dare we call it?—true art, and their annual "Forewords" in the catalogue are generally worth quoting. This year they are:

TO OUR CRITICS.

Some critics will persist in thinking, and saying, that some errites will persist in thinking, and saying, that some methods of art are right and others are wrong.

It seems only too easy for the partisan critic to be blind to the merits of a thing well done in a way of which he disapproves, and blind also to the defects of a thing ill-

done in the way of which he approves.

However much we may smile at some of the fuzzy 'nocturnes" and weird colour reproductions obtained by some of these enthusiastic photo-artists, it cannot be denied that they are influencing photography, and, incidentally perhaps, painting for good. There are, alas! many examples of "vaunting ambition that o'erleaps itself," but somehow this year these seem fewer than usual. The failures are more particularly noticeable in the colourpictures, but some of these again are among the most successful. In this department the foreign exhibitors are in evidence. "Essai en Couleurs" (97), by C. Sollet, is an ambitious piece of work, which is not altogether successful, but the "Coucher du soleid sur la lagune de Venise" 103) of S. Dillaye is a very delicate and well-executed piece of colouring. "Vertige" (110), by P. Dubreuil, is a very creditable arrangement of light and shade, but "Frise pour chambre d'enfants" (111), by the same exhibitor, does not seem to be quite in true perspective. There are some fine portraits, J. Craig Annan being particularly happy in some of his essays. Perhaps one of the most pleasing of Mr. Annan's attempts is "J. Cleland, Esq., M.D., F.R.S." (40), a fine photograph, full of characteristics of the state of the characteristics of the state of the acter and strong in evidence of accomplished technique. Frederick H. Evans has likewise several good portraits. These include "A. Horsley Hinton" (51), "George Bernard Shaw" (63), and others. Portraiture is also strikingly successful in the hands of Alvin Langdon Coburn. who has lifelike reproductions of "Austin Dobson" (146), "Mark Twain" (149), "G. K. Chesterton" (154), and others on view "Several fine landscapes are as usual southly A. view. Several fine landscapes are, as usual, sent by A. Horsley Hinton. A green-brown nocturne is "The Pond-Moonrise" (138), by Edward J. Steichen. It is a characteristically sombre piece of work; the moon rising behind a line of trees, but the full-length reflection of the trees in the pond give the work a lopsided look. The picture next to it, "A Tale of Isolde" (139), by F. Benedict Herzog, is priced at 100?.—why is probably known to the author and the other Links in the Ring, and perhaps those pharmacists interested in photography (and who are not nowadays?) who visit the Salon between now and October 21 will be able to tell us.

GOUT AND GENIUS, it is said by a German professor, go together. In 1775 Frederick William of Prussia wrote to one of the foremost chemists of that day who had forwarded particulars of a well-attested remedy for gout: "I thank you for the cure, and prefer to trust Nature. Chemists are always discovering these things. When they first appear people have great faith in them, but their delight in them doesn't last long."

Toothache.*

TOOTHACHE, or odontalgia, is not a disease in itself, but a symptom, and we should apply the term "odentalgia" to pain distinctly referred to an individual tooth, distinguishing it from neuralgia, in which the pain is not a not apply to the control of the pain is not apply to the control of referred to the tooth or is only associated with local tooth-

By some authors the term "odontalgia" is used to indicate pain in or around teeth, and treated under the headings of local and referred odontalgia; but I think that, at all events for the purposes of discussion, it is better to confine the term odontalgia to cases of toothache in which the pain is definitely referred by the patient to a particular tooth or teeth, and consider all cases of referred toothache under the subject of neuralgia. It is very difficult, however, to draw a hard-and-fast line between neuralgia and toothache—toothache is often associated with neuralgia, and frequently assumes a neuralgic character.

When pain is due to irritation of the pulp without exposure—it is local in character—the tooth is very sensitive to heat and cold, and is readily distinguished as the exciting cause of the odontalgia. It is otherwise, however, when the pulp is exposed, whether from caries or accident; violent pain may be caused by the application of heat or cold, but the pain is frequently referred to some other region, and the tooth as the exciting cause may be overlooked; the pain

has become neuralgic.

The exciting causes of toothache are:

1. Irritation and exposure of the pulp from caries, erosion, or attrition.

2. Secondary deposits in the pulp—as "pulp stones" in

2. Secondary deposits in the pulp—as "pulp stones" in earies—sometimes giving rise to odontalgia, but very frequently to referred neuralgic pain.

3. Localised suppuration of the pulp. Very severe toothache is caused by local suppuration in the pulp, especially when confined under a filling. Intense local pain is often experienced when the pent-up pus is allowed to escape on removal of the filling, the alteration of blood pressure in the pulp appearing to be the cause of this very severe paroxysm.

4. Direct traumatism—exposure by fracture of the tooth.
5. Exostosis—eementosis. The pain is both local and diffused, percussion causing distinct pain in the tooth.
6. Periostitis, due to direct injury or septic extension from the pulp. The pain in inflammatory conditions of the periodental membrane is of a more continuous character and

dental membrane is of a more continuous character and associated with great local tenderness.

7. Alveolar absecss.8. Pain from exposure of the cementum in pyorrhoea.

Necrosis of the root.

9. Necrosis of the root.
10. Pin-point absorption of the end of the root, in which the irregularity of the process of absorption leaves sharp spicules of cementum and dentine surrounding the nerve trunk, that cause severe local pain, especially on pressure—a condition of the tooth very difficult to diagnose.
11. Difficult cruption and malposition of teeth, as from impacted wisdom teeth. The pain from this cause would, however, usually fall under the head of neuralgia.

The pulp of a tooth being very freely supplied with blood-vessels and nerves, and closely confined within a hard resisting cavity, is especially prone to suffer from acute inflammatory conditions, the swelling which accompanies inflammation leading to severe pressure upon the pulp

Caries causes toothache by direct exposure of the pulp, or by penetrating to within a short distance of the pulp, the softened dentine allowing the passage of various irritants—as thermal changes, acids, etc.; but it is a fact that has been often noted that caries in its early commencement will often cause toothache, although when the disease is further advanced there may be little or no pain, but it recurs with great intensity when the pulp at last becomes exposed. Our present knowledge of dental histology does not enable us to explain exactly how sensation is conveyed from the enamel, an extravascular tissue, to the pulp, the intermediate tissues remaining intact. The same conditions which cause localised toothache may also give rise to neu-

Conundrum Column.

Illustrated by Fred Reynolds, Phar. Chem.

Last week's drawing meant "Belladonna plaster on swans-down." From a large selection of Limericks and other verses at a shilling each, we print as many of the happiest as we can find room for.

> Fred Reynolds, you're a wonderful ereature, Really, drawing with you is a feature, So perhaps you will own To Emp. Bell. on Swansdown, As the answer to C. & D. picture.

A. E. KING.

He answer to corder'd a plaster

For a patient, a bit of a grasper;

Said he, "On Swansdown

Spread Belladonn brown,

Spread Belladonn brown, And make it a regular rasper.

LONG TOM.

Please send me that bobsworth of bronze down, For I've jotted the pros and the cons down,
And your picture, I guess,
Means nothing unless
It is Emp. Belladonnæ on Swansdown.

C. C. B.

The eonundrum you ask us to guess The condition you ask us to guess
Is no easy one, nevertheless,
The answer, you see,
Is Emp. bellad. S.D.
Though the birds look like ducks in distress.

The pains of a damsel in town Beneath the ninth hook of her gown— All treatment defied, Till her maiden-aunt tried

Emplast. Belladonn. on Swansdown. F. A. S.

He writhed like one on a rack, His language was blue, almost black; But he smiled anon

When the Emp. belladon.
On Swansdown gave ease to his back.

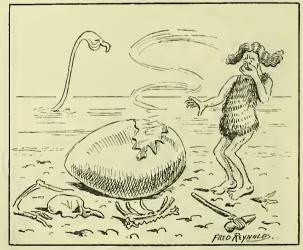
W. MURRAY.

Two swans down Huntingdon way Went out a-walking one day; Ere they'd time to look round They were fixed to the ground With plaster of Belladonnæ.

SIGMA.

A heedless young fellow of Capetown.
In front of a motor got knocked down;
They picked him up quick,
And said, Run off slick

And said, Run on shek For Emp. Belladonnæ on Swansdown. Miss C. Broadbent.



WHAT DOES THE ABOVE PICTURE REPRESENT?

The artist has sent us the title, but there are so many Limerick-writers among our readers that we give them another opportunity of expressing their ideas. They may write on postcards, and, as before, we shall pay 1s. to the writer of each Limerick that we print; but we cannot print more than will fill the space as above. A fresh picture will appear each week this month.

^{*} Abstract of a paper by Mr. J. Howard Mummery, L.D.S., M.R.C.S. Eng., reprinted from the "British Medical Journal."

Observations and Reflections. By Xrayser.

The Evolution of the Schedule

is perhaps the most important event in the history of British pharmacy, but I am not aware that any attempt to trace it to its origin has been made before the publication of the article in last week's C. & D., and the information there given was probably new to most living pharmacists. It is generally understood that Dr. (afterwards Sir) John Simon, to whom we owe more than to any other man the sanitary reforms of the past half-century, was the prime author of the Schedule; but it is clear from the article that he had adapted it from the French. The division into two parts was suggested in the House of Commons in 1868 by Lord Elche (the present Earl of Wemyss), and was the work of less than five minutes; but nobody can tell how effective it has been in rendering the Act workable. The peculiar importance of the Schedule is due to the fact that neither in 1868 nor at any time since could there have been a Pharmacy Act of any active value without it. The public interest in pharmacy recognised by Government departments was limited to the provision of a check on poisoning: murderous first, accidental next, and suicidal last. It remains to be seen whether Mr. Leggett is to enjoy the glory of so mutilating a useful piece of legislation, planned by such a painstaking reformer as Sir John Simon, as to render it ridiculous, by a strict insistence on its literal construction,

Lord Ardwa'l's Judgment

in the Bile Beans action may be almost said to inaugurate a new era in the public attitude towards proprietary medicines. Hitherto medicine advertisers have been far too frequently treated as licensed, or at least tolerated, libertines in respect to their imaginative Picturesque accounts of the discovery of the remedial virtues of strange herbs in unexplored lands have been passed even in Courts with an indulgent smile, as "only pretty Fanny's way." Lord Ardwall's cold analysis of one of these fancy records is a disconcerting contrast to the traditional leniency. But he sees that a narrative, which might strike a trained intellect as merely ornamental, is not printed eighty-three million times without a definite object; it is intended to be believed, and, as a matter of fact, is believed, and helps to sell the medicine. This narrative, so far as it is false, is declared by the Scotch Court to be fraudulent. Then comes the question of the relation of honourable retail pharmacists towards such products. Bile Beans are not by any means the first medicine heralded by a fictitious story of long and scientific investigation resulting in a discovery of universal value. It only happens that these "beans" have had the misfortune to focus the fierce light of Lord Ardwall's intellect. Now, regardless of profit, how is the aforesaid honourable pharmacist who agrees with Lord Ardwall's criticism, and who claims to be a competent guardian of the public welfare in the matter of medicines, to act in regard to any article which falls within the scope of those strictures?

The Ethics of Substitution

also came under Lord Ardwall's scalpel. He could not approve of the respondent's proceedings, he said. This ought to command the attention of the majority of the trade, for the items of conduct which called forth the learned Judge's reprimand are not uncommon in the business of pharmacy. The only distinction between most of us and Mr. Davidson is that not many of us can boast of his pluck. Well, in what way had he offended?

The first of his Lordship's allegations was that he had originally thought of calling his own bile beans Dr. Scott's, "a name as fictitious as that of Charles Forde." Apparently he had abandoned that intention, and it might have been supposed that this should have counted to him for righteousness. However this may be, it cannot be denied that the employment of fictitious names is a not unfrequent device in chemists' specialities, and there is not much doubt about what Lord Ardwall would say of the Dr. X, Dr. Y, and Dr. Z whose names figure on a great many packets of corn-silk. Perhaps some ingenious casuist will oblige with a defence of this little deception. Lord Ardwall's next averment was that the respondent, "having determined to secure the benefits of the catching alliterative name, set about considering how he might keep within the letter of the law." Of course there is nothing wrong in keeping within the letter of the law; that is what the law says we are to do. Presumably Lord Ardwall's suggestion is that, though it may not have actually crossed the boundary of legality, the respondent's trespass on the domain of the complainants. coupled with his careful circumspection, was so unfair as to deprive him of the Court's sympathy. So much depends on the way of putting things. It is quite possible to make any and every form of competition look discreditable. We are all more or less imitating someone else, and

In no other Trade.

so far as I recollect, except in that of proprietary medicines is it ever suggested that there is anything disgraceful in imitation. There have been pioneers in the manufacture of sewing-machines, typewriters, feedingbottles, steam-ploughs, and pianos; so, too, in the invention of telephones, wireless telegraphy, and electric light. These have the glory and the monopolies as far as they can secure them under patent laws. But as soon as their products become popular with the public hosts of imitators and improvers come into the arena, and no one dreams of regarding such competition as in any degree disreputable. A few years ago a foreign manufacturer put a milk-chocolate on the market; it was appreciated, and at once a dozen other highly respectable firms began to make milk-chocolate. Why should there be any moral obloquy in copying a pill, and none in trying to obtain a share of the public demand for a sweetmeat or a sewing-machine which someone else has created or proved to exist?

The Original of Shylock

has been identified by some Shakespearean scholars with a certain Dr. Roderigo Lopez, a Portuguese Jew, who, having renounced his first faith, settled in London, became the first resident physician at St. Bartholomew's Hospital, and for a time was chief physician to Queen Elizabeth. The "British Medical Journal" states that Lopez was convicted of conspiring with others to poison the Queen, and was hanged at Tyburn. The Earl of Essex, formerly his friend, but later his bitter enemy, was mainly instrumental in securing his conviction. Moreover, Lopez had been granted by the Queen a monopoly of the importation of aniseed and sumach, and these monopolies, which Elizabeth had bestowed so lavishly, were fiercely resented by the public, who had to pay for them. There was no similarity between the careers of Lopez and Shylock, but it is supposed that Shakespeare, who had a keen eye for business, wrote the "Merchant of Venice" just when the popular humour was likely to welcome an odious presentation of a Jewish character.

Physician: "Your ailment lies in the larynx, thorax, and epiglottis." Holligan: "Indade? An' Oi whos afther thinkin' th' trouble was in me throat!"

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Editorial Comments.

Future Pharmacy Legislation.

Complications of the Poisons Schedule.

In our last article it was shown that Schedule A to the Pharmacy Act, 1868, was divided into two parts because Parliament considered the stringency of the conditions for sale of poisons in the first part should not be applied to the less lethal poisons in the second part. It was stated that this clear intention of Parliament has to some extent been overruled by the Law Courts. Confusion has further been introduced by recent cases (now awaiting appeal), in which it was said that the Pharmaceutical Council's power to add to the Schedule has been exceeded. The net effect is that poisons which Parliament said are in Part 2 have to be treated as if they were in Part 1, and some which the Pharmaceutical Society have added to the second part are to be considered as in the first. We say that the deductions are absurd in practice, whatever they may be in law, and the sooner the status quo is restored the better.

If the Growth of the Schedule since 1868

is looked at a clear idea will be got of the formation of the legal tangle. Section 2 of the Act declares that articles named in Schedule (A) are to be deemed poisons within the meaning of this Act, and gives the Pharmaceutical Society power to declare any article to be deemed a poison. The Section is badly worded, but it means that the Schedule as agreed to by Parliament may be added to by the Society. When the Act came into force it was clearly understood by those in authority that the entries in the Schedule meant the specified articles only. There was a quite early decision of justices bearing on the point. On August 25, 1869, a Worthing chemist was fined under Section 17 for selling prussic acid to an unknown person: the article sold was a lotion containing rose-water and prussic acid, dispensed to prescription written by the purchaser, and treated as a dispensing transaction by the chemist. On appeal (supported by the Pharmaceutical Society) to the Court of Queen's Bench the justices' decision was reversed (February 14, The point of law here was, What constitutes dispensing? but the fact cannot be overlooked that the justices considered an article containing prussic acid to be the article named in the Schedule-" Prussic acid." Whether the Society and Privy Council held that view or not is now immaterial, for on December 1, 1869, after an interchange of

views between these bodies, a resolution deeming certain articles to be poison was passed:

Preparations of prussie acid, of eyanide of potassium and all metallic cyanides, of stryclinine and of atropine, were deemed to bo of the first part.

Preparations of corrosive sublimate and of morphine, vermin-killers containing scheduled poisons, and the tine-ture and all liquid vesicating preparations of cantharides, were deemed (by inference) to be of the second part, as were also red oxido of mercury and ammoniated mercury, which were not mentioned in any manner in the Act.

Since these additions chloral hydrate and its preparations (December 1877), nux vomica and its preparations (July 1882), certain liquid preparations of carbolic acid (July 1900), and cocaine and its salts, picrotoxin, preparations of cocaine, digitalis and its preparations, mercuric iodide, mercurie sulphocyanide, and strophanthus and its preparations (July 1905) have been deemed to be poisons, cocaine and its salts and picrotoxin only being deemed to be in Part 1. It will be seen that all the additions to the first part are, with the exception of picrotoxin, covered by the original schedule, if the decision in the Pharmaceutical Society v. Armson (1894), that a preparation containing a poison is the poison itself, is accepted. The Society has acted upon this in administering the Act, and prosecutes, e.g., for the sale of red precipitate ointment. quently, the addition to Part 2 of preparations of poisons specified by Parliament in the first part of the Schedule aro ultra vires, and if so cantharides tincture, etc., preparations of cocaine, preparations of corrosive sublimate, preparations of morphine, and some vermin-killers, which have been placed in the second part since 1868, are really Part 1 poisons. This is bad enough, but

There is a Worse Anomaly.

The original Schedule places "opium and all preparations of opium or of poppies" in Part 2. On October 14, 1893, an agent of the Pharmaceutical Society purchased from an unqualified vendor (Mr. Armson) a proprietary preparation which the analytical evidence proved to contain opium, alkaloids of opium amounting to 0.23 grain having been isolated from it, and of this a tenth of a grain was morphine. Instead of adhering to the letter of the Act, that all preparations of opium are in Part 2, the Society prosecuted the seller for selling morphine. The Magistrates convicted, the Divisional Court of Queen's Bench upheld the decision, and the Court of Appeal agreed. Nene of the Courts considered directly whether the poison was in Part 1 or Part 2-they had only to determine that a poison was sold; but the decision established the principle that a preparation made from opium is morphine. If that be so, belladonna and its preparations, nux vomica and its preparations, and opium and all preparations of opium or of poppies, are in the first part, because from them may be extracted components named in Part 1. It is possible to instance other cases conducted by the Pharmaceutical Society which give effect to this absurdity—for absurdity it undoubtedly is—and the only chance of returning to sweet reasonableness in the matter is presented in the Rankin's ointment appeal cases. There, it is to be hoped, counsel for the appellants may succeed in getting the Court to see that the Armson decision did not rule that a preparation of opium is morphine. That might clear the way to some extent, but nothing short of recasting the Schedule by legislation can give a full sense of security. Since the present mixed condition is chiefly due to the Pharmaceutical Society, it is surely the duty of its counsel to initiate the legislation, and we believe that the trade as a whole, when the facts known to those in authority are generally realised, will insist that the Pharmacy Bill should not be again introduced without dealing with this subject.

Pharmacy in Orange River Colony.

A FEW months ago we referred to the efforts which were being made by medical members of the Medical and Pharmacy Council in the Orange River Colony to pass moro stringent regulations for the sale of poisons, especially in respect to proprietary medicines which contain poisons within the meaning of the Ordinance passed in January 1904. The chemists of the Colony, through their representatives in the Council, succeeded in moderating the ardour of the medical majority, to the extent that the latter realised their first ideas to be unworkable, and, as stated in our issue of May 20, a working compromise was arrived at. The terms of this were made public by Lord B. T. Blackwood, Acting Colonial Secretary, in a "Gazette Extraordinary" dated August 5, which has just come to hand. Section 11 of the Ordinance gives the Council power, subject to the approval of the Lieutenant-Governor, to frame, amend, and repeal regulations in regard to (a) Council-meetings, (b) diplomas and certificates, (c) fees for registration, (d) courses of study and examination and registration fees for chemists and druggists, nurses, and midwives, (e) registration of midwives, (f) the practice of nurses and midwives, (g) regulating the keeping, dispensing and sale of poisons within the meaning of the Ordinance, and (h) generally to give effect to the Ordinance. The regulations which were gazetted last month deal with all these, but we refer here only to the last two, as to which the following are the new conditions:

Sub-section G.

Regulating the keeping, dispensing and sale of poisons within the meaning of this Ordinance.

The Ordinance shall be taken as it stands with regard to regulating the keeping, dispensing and sale of possons, with

the following additions and amendments:

1. That crude opium be placed in Division 1 of the third schedule, and that in the case of a sale of preparations of opium, morphine and strychnine, and preparations of arsenic for internal use, the name and proportion of poison shall be stated on the package, which shall be labelled "Poison."

2. That the sulphocyanides of the metals, the syrups of 2. That the sulphocyanides of the metals, the syrups of the hypophosphites with strychnine, tablets of the hypophosphites with strychnine, Easton's syrup and tablets of the same composition as Easton's syrup, be included in Division 2, and that in Division 3 Chamberlain's Remedy shall read Chamberlain's Colie-remedy.

3. That the words "Compressed tablets containing poisons within the meaning of Divisions 1 and 2 of the Schedule and representations of hyperphetale with strengthine." be addeded.

preparations of hypophosphites with strychnino" be deleted

from Division 3.

SUB-SECTION H.

Generally for carrying into effect the objects of this Ordinance.

1. The sale of poisons by any general dealer not having obtained a certificate in terms of Section 50 of the Ordinance

shall be prohibited as from January 1, 1906.

2. Every shop shall be conducted under the actual and personal supervision of some registered chemist and druggist, whose name in capital letters not less than half an inch in size shall be exhibited on the front of such shop, and any person contravening this regulation shall be hable to a penalty of 52 sterling, or, in default of payment, to imprisonment for a period not exceeding one month.

3. The regulations with regard to the alteration in the Poisons Schedule shall take effect as from January 1, 1906.

4. Advertising either in the newspapers or by other similar agency by any person on the Medical or Dental Register constitutes improper and unprofessional conduct, and the Council shall take action in the case of any person

proved to be so advertising.

Apparently the Council has taken an heroic view of its powers. By Section 46 of the Ordinance (which is Section 2 of the Pharmacy Act, 1868) it may resolve that any article is a poison within the meaning of Divisions 1, 2, or 3 of the Schedule, and when the Lieutenant-Governor approves, and the fact is gazetted, "the article shall be deemed to be a poison accordingly within the

meaning of the Ordinance." This obviously means that the article was not within the Ordinance before-ergo not a poison. Nevertheless, the Council has resolved to shift opium from Division 2 to Division 1 of the Schedule, and wipes out the entry for compressed tablets in Division 3. With all deference to the Council we submit there is no power in the Ordinance whereby the Council may alter the Schedule in this manner, and its action as regards opium and compressed tablets is ultra vires. doubt, if any, is in regard to opium; there is none respecting the compressed tablets entry in Division 3: it stands in the Ordinance as an enactment by the Lieutenant-Governor and the Legislative Council, and (although it is ridiculous) the Medical and Pharmacy Council has no power to authorise the Lieutenant-Governor to annul the entry. We note also that the Council says the alterations in the Schedule will take effect on January 1, 1906; but Section 46 says that on the expiration of a month from the date of gazetting articles added shall be deemed to be poisons. This applies to syrups and tablets containing strychnine. The regulation to the effect that in the sale of preparations of opium, morphine, strychnine, and arsenic (this for internal use only) the name of the poison and its proportion shall be stated on the package is the residue of the medical majority's original proposal on this point. It will apply to all preparations of these poisons—official, officinal and proprietary. As to Subsection H, under Section 50 general dealers six miles beyond a chemist's shop are allowed to sell poisons in Division 3, as well as tincture of opium, poisons used for veterinary purposes, vermin-killers, and arsenic or any compounds thereof, and strychnine or any compounds thereof, in unbroken vials, provided they obtain a certificate annually from the Resident Magistrate. Regulation 1 is therefore an intimation that the Council means to carry the law into effect. Regulation 2 is Section 41 of the Ordinance plus the words beginning "and any person contravening." We question if the imposition of a fine with the alternative of a month's imprisonment is a regulation within the meaning of the Ordinance; in fact, it appears to us that the Medical and Pharmacy Council is usurping the authority of the Legislative Council.

Formalin in Milk.

ONE of the first items that strikes the chemist who opens the report (1903-4) of the Medical Officer to the Local Government Board is an almost insidious reference to the properties of formaldehyde when used as a preservative for milk. During the past few years there have been within the Metropolitan area several outbreaks of "epidemic skin-disease," the origin of which has been obscure, but medical practitioners have connected the trouble with the milk-supply. Medical officers of this Department were called in to help in the elucidation of such outbreaks. The disease has been called "epidemic eczema" by Dr. T. O. Savill, and the features of the trouble certainly resemble eczema, desquamation being a practically constant feature. Dr. Copeman, who investigated an outbreak at Hendon, eliminated practically every probable cause except milk, and ultimately it was discovered that the milk consumed was preserved with formalin. No direct proof that formaldehyde caused the skin-trouble is given, but the following significant paragraph is printed:

Formalin, which is a 40-per-cent. solution of formaldehyde, is a well-known powerful preservative. But it possosses the disadvantage of retarding, or even preventing altogether, the pancreatic digestion, and, further, by its tendency to combine with the proteids of milk, is apt to form in that fluid insoluble compounds, thus lowering the digestive value of the milk, and perhaps conferring on it irritative properties. In these respects formalin was regarded by the Departmental Committee appointed to inquire into the use of preservatives and colouring-matters in foods as a danger to health, and accordingly that Committee recommended that the use of that substance in the preparation of foods and drinks should be absolutely prohibited.

Here a step in advance is taken in respect to formalin. The direct association of formalin-preserved milk with "epidemic eczema" naturally leads to the suggestion that formalin causes eczema. Perhaps it does, perhaps it does not, but there is no proof in the Medical Officer's report, nor in Dr. S. Monckton Copeman's report to him. May we suggest that this is a matter upon which the fullest investigation should be made without delay? If formalin causes epidemic eczema, its use in the preservation of food ought to be stopped at the earliest possible date. Until that is done suspicion, perhaps unjustifiable, must necessarily rest upon an article which is in common use, and in respect to which no other evil is known.

The report also contains interesting information regarding plague, with valuable scientific data as to the occurrence of *Bacillus pestis* in rats, which throw light on the relation between the disease as it occurs in these animals and in man. Other microbic diseases have been specially investigated by officers of the Department, the reports of their researches being given in full; and there is also a report on chloroforminated vaccine, which shows that out of 65,735 vaccinations with this 98 per cent. were successful.

The Decadents.

The burning question of the hour (This need not give alarm, I wist), Is what will soon become of our Semi-professional pharmacist? In olden times he bought his drugs And never murmured at expense.

To such as he

A warranty
Was absolute impertinence.
But nowadays another Cult
(Less proud and full of charm, I wist),

Point out the harm that might result
To the semi-professional pharmacist,
If lynx-eyed drug-inspector found
An unexplained deficiency.
To such as he

To such as he
A warranty
Is more than a sufficiency.

These agitators now abound
(Their tenets do much harm, I wist);
In Highest Circles they are found
(Poor semi-professional pharmacist).
They say the President himself
Spoke on this question vital too;
And said, "To me

And said, "To me
A warranty
'S a thing I'm quite entitled to!"
The proud wholesaler stares aghast
(He feels a trifle warm, I wist),
"Down to the depths he's sinking fast,
Our semi-professional pharmacist.
The only thing is," so says he,
"In face of such perversity,
We quite agree

A warranty
'S a present-day necessity.''

Women as Dispensers.

"Dispensing as a Profession for Women" was the subject of an article in "Home Chat" of September 9, and in the course of it the following statement is made:

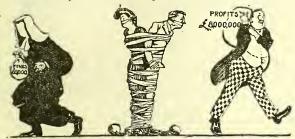
There are 150 women who have passed the Minor, and seventeen who have passed the Major examination. The Secretary of the Association of Women Pharmacists told the writer that she had every reason to believe that the great majority of these were employed at the present time. "We have an employment bureau for women pharmacists,"

she said, "and if any are in search of a post we very soon hear of it."

Mention is not made of the fact that there are hundreds more of women dispensers in the market, and that the majority of those who have qualified by one portal or another for such appointments have failed to obtain employment. present congested condition of the women-dispensers' ranks is largely due to the reiteration by such papers as "Home Chat" that dispensing is a good employment for women, regardless of the fact that many who have taken the advice have utterly failed to find an outlet for their ability.

Nonsense about Adulteration.

The illustration which we give in this paragraph is reproduced from the "Daily Mail" of September 13, and accompanies an article by Mr. T. P. Manning on "The Enormous Profits of Adulteration." The illustration has appended to it the inscription which we reprint:



"WHAT THE LAW EXACTS FROM THE ADULTERATOR IN LONDON. The fines for adulteration amount in the metropolis to about 6,000%, a year. The profits are estimated to exceed 8,000,000%. The people who unwittingly furnish the profits are practically unprotected, for inadequate fines are in-flicted and loosely worded laws are too often interpreted in favour of the adulterator.

Mr. Manning confines his statistics to milk, butter, coffee, mustard, pepper, ginger, vinegar, olive oil, jam, lard, margarine, brandy, rum, and whisky, but with the exception of a statement about pepper and one about a milk-dealer there is not a single figure in the article which justifies the estimate of 8,000,000l. If Mr. Manning had not allowed his imagination full play he would have realised how utterly absurd his statement is. In London during 1903 public analysts examined 19,490 samples of food and drugs and reported against 10.8 per cent. As proceedings are taken and convictions obtained in only half the instances in which the analysts say there is adulteration, it follows that Mr. Manning's estimate of profits on adulteration (8,000,000%) stands for 5 per cent. only of the food supplied to London That means 160,000,000l. for the whole of the food supplied, or 1,120,000,600%, for England and Wales, or 1,600,000,000% for the United Kingdom, or about eight times more than the value of the whole of the foods and drinks imported yearly! Statements like Mr. Manning's may do harm, but the most surprising thing is that a newspaper with a million circulation now and then is apparently unable to check such wild statements.

The Living-in System.

At the last session of the Trade Union Congress, held at Hanley on Saturday, September 9, the Congress supported the National Amalgamated Union of Shop-assistants. Warehousemen, and Clerks in its efforts to abolish the living-in system, whereby shop-workers are paid partly in truck instead of current coin of the realm, and instructed the Parliamentary Committee to promote a Bill to extend the Truck Acts, 1831-96, to all workers in the distributive trades. If this is carried out it will seriously affect the chemist's business. At present chemists' assist-

ants are not included in all the Truck Acts, which refer to workmen—i.e., "any person... being a labourer, servant in hasbandry, journeyman, artificer, handicraftsman, miner, or otherwise engaged in manual labour." By the 1831 Act, in all contracts for the hire of any workman it is required that the wages shall be paid in the current coin of the realm only, and if it be agreed that they shall be paid in any other manner the contract shall be void. If this were applied to the drug-trade it would abolish the living-in system, for, although assistants were paid in full, with the understanding that they would pay their employers or housekeepers for board and lodging, this also by the 1831 Act is illegal. The Act was modified by one of 1887 so as to make it possible to pay servants in husbandry wages and food, non-intoxicating drink, and a cottage, or other allowances, but otherwise the amendments did not affect the main principle. The Act of 1896 deals chiefly with deduction of fines from wages, Section 1 already applying to shop-assistants as well as workmen. It requires that no deduction shall be made from the wages in respect to prohibited acts or omissions likely to cause damage to the employer or hindrance to his business unless the conditions are specified in the contract. It will be necessary to watch what trade unions or others may do towards making these Acts applicable to shops generally. Although the day of the living in system is rapidly passing so far as pharmacy is concerned, we do not think that even its opponents will consent to be saddled with the Truck Act in giving the system its coup de grâce.

College Motes.

GLASGOW SCHOOL OF PHARMACY.—Mr. John Lothian, Principal of this school, intimates that the session will begin at

cipal of this school, intimates that the session will begin at 180 West Regent Street, Glasgow, on October 2.

The High School, Newcastle, Staffs, is about to commence science classes in the evenings for students, which may prove of value to chemists' apprentices. Mr. Weston Poole, pharmaceutical chemist, High Street, has the arrangements in hand

SCHOOL OF PHARMACY.—Invitations have been issued by the President, Vice-President, and Council for the inaugural sessional address to be delivered by Sir Boverton Redwood, F.I.C. F.R.S.E., on Monday, October 2, at three o'clock, when the Hanbury gold medal, which has been awarded this year to Professor Ernst Schmidt, of Marburg, will also be presented.

BATTERSEA POLYTECHNIC, Battersea Park Road, S.W. The ession at this institute opens on September 25. The classes session at this institute opens on September 25. The classes include complete degree courses in science, conducted by recognised teachers of the London University. There are also special facilities for laboratory work in chemistry for pharmaceutical chemists and others. The laboratory is open on Wcdnesdays for this purpose from 2 to 10 p.m., for which the fee is 27s. per session.

SOUTH-WESTERN POLYTECHNIC, Manresa Road, Chelsea, S.W. SOUTH-WESTERN POLYTECHNIC, Manresa Road, Chelsea, S.W. The evening classes commencing at this Polytechnic on September 25 include a course of experimental lectures on chemistry suitable for candidates for the Minor examination, to be delivered on Tuesday evenings by Mr. J. B. Coleman, F.I.C. The fee for the session is 15s. Miror and Major courses in botany, consisting of lectures, followed by practical work, are also available for pharmaceutical students on Wednesday available. Wednesday evenings. The lecturers are Mr. H. B. Lacey and Mr. T. G. Hill, F.L.S., and the fees are 10s. and 15s. for the Minor and Major courses respectively.

WHERE TO STUDY.

The following educational institutions are advertising in this

Muter's School of Pharmacy, 325 Kennington Road, S.E. Westminster College of Chemistry, Trinity Square, Borough, S.E.

Metropolitan College of Pharmacy, 160 and 162 Kennington Park Road. S.E.

London College of Chemistry, 323 Clapham Road, S.W. Liverpool School of Pharmacy, 6 Sandon Terrace, Liverpool.

Glasgow School of Pharmacy, 180 West Regent Street, Glasgow.

Charing Cross Hospital Medical School, Charing Cross, London, W.C. City of London College, White Street, Moorfields, E.C.

South-western Polytechnic, Manresa Road, S.W.

Pharmacology of Indaconitine and Bikbaconitine.*

By J. Theodore Cash, M.D., F.R.S., and Wyndham R. Dunstan, M.A., LL.D., F.R.S.

TWO new "aconitines" have been isolated at the Imperial Institute from two varieties of Indian aconite. One, which has been named indaconitine, was found in the roots of the Indian aconite, called by Bruhl, Aconitum Nopellus, var. hians, since identified by Stapf as a new species and named by him Aconitum chasmanthum. The plant being abundant in India, the highly toxic alkaloid derived from it has been called "indaconitine," a name appropriate to the properties of this alkaloid, which closely resembles those of aconitine derived from the common European aconite, Aconitum Napellus.

The other alkaloid has been named "bikhaconitine," being derived from one of the highly poisonous forms of aconite known in India under the vernacular name of "Bikh." This aconite was named by Bruhl, Aconitum ferox, var. spicatum, but has been re-named Aconitum spicatum by Stapf, who regards it as a distinct species.

The chemistry of these two alkaloids has been worked out at the Imperial Institute, and will be fully described in a

separate communication.

Indaconitine differs only slightly from aconitine in its composition and properties, but in several respects these differences are well marked. Indaconitine crystallises well, but its usual crystalline habit is distinct from that of aconitine, although the crystallographic characters of the two substances are very similar, and they may prove to be isomorphous. Most of the salts crystallise readily. Like aconitine, indaconitine undergoes hydrolysis in two stages. Partial hydrolysis leads to the separation of a molecule of rartial hydrolysis leads to the separation of a molecule of acetic acid, and the formation of a base which has been named benzoyl-pseudaconine. This substance on further hydrolysis furnishes one molecule of benzoic acid, and a base which proves to be identical with pseudaconine, the ultimate hydrolytic product of pseudaconitine derived from forms of Aconitum ferox. Indaconitine, therefore, contains the acetyl and benzoyl groups present in aconitine of European origin, associated with the basic nucleus of the Indian pseudaconitine. Its pharmacology corresponds with its chemical relation to these two alkaloids.

Bikhaconitine closely resembles pseudaconitine, but is chemically distinct from it. The alkaloid and its salts crystallise well. Similarly its derivatives somewhat resemble those of pseudaconitine, but are distinct substances. On partial hydrolysis bikhaconitine furnishes one molecule of acetic acid and veratryl-bikhaconine, which on further hydrolysis furnishes one molecule of veratric acid and bikhaconine. Bikhaconitine is therefore, chemically, the analogue of pseudaconitine, and is also its pharmacological congener. It is only slightly inferior in toxic power to pseudaconitine, which is the most poisonous aconitine yet

The examination of the physiological action of indaconitine and bikhaconitine has been carried out on parallel lines with that of the alkaloids aconitine, pseudaconitine, and japaconitine. In each case the hydrobromide was the

salt employed.

The pharmacological experiments show that the toxicity of indaconitine is less than that of bikhaconitine towards warm-blooded animals; in this respect the former stands very near to the acontine of A. Napellus, whilst the latter, being somewhat stronger than japaconitine, is to be referred to a position between this alkaloid and pseudaconitine from forms of A. ferox, which is much the most active of the series.

The depression of the respiratory function by inda-conitine is less than that produced by bikhaconitine, and to this the greater toxicity of the latter is referable. Repeated doses of alkaloids administered at regular intervals and in similar fractional proportions of the lethal dose are followed by a more marked toxic effect when bikh-aconitine is administered rather than indaconitine. Towards

frogs the toxicity of the two alkaloids is practically equal, bikhaconitine is more active than indaconitine in reducing the respiratory activity. On the other hand, it is somewhat less active in abolishing the excitability of muscular and intramuscular motor nervous tissue (immersion experiments), and in reducing the ability of the muscle-nerve preparation poisoned in situ for the performance of work sufficient to cause fatigue. The local effect of the two aconitines when applied to the skin by inunction, is equal and similar to that of the aconitines already considered.

Indaconitine and bikhaconitine may therefore be substituted for aconitine and pseudaconitine for internal use, indaconitine being administrable in the same dose as aconitine (from A. Napellus) and bikhaconitine in proportion of 0.75 of the unit dose of the former, whilst for local application they may be used as constituents of ointments in

similar proportions to aconitine.

Dr. Croll, of the Materia Medica Department, Aberdeen University, carried out the physiological and allied experiments for the paper, and Mr. A. E. Andrews, Salters' Research Fellow in the Imperial Institute laboratories, prepared the pure alkaloidal salts.

Birth.

Harvey.—At 17 Bramham Gardens, South Kensington, S.W., on September 8, the wife of Ralph Key Harvey (Messrs. Barron, Harveys & Co.), of a daughter.

Marriages.

BOWMAN—NORRIE.—At Lennie Mains, Cramond, on September 4, by the Rev. Archibald Bell, assisted by the Rev. J. B. G. Rouse, John R. Y. Bowman, chemist and druggist, Leith, to Margaret, daughter of the late Mr. David Norrie.

FOTHERINGHAM—FOREES.—At the Cross Keys Hotel, Dalkeith, on September 6, by the Rev. N. D. MacLachlan, B.D., William Fotheringham, chemist and druggist, Bo'ness, to Maud, elder daughter of Mr. John Forbes, D. U. L. Dalkeith.

Dalby—Dimond.—At St. Luke's Church, West Hamp-stead, on August 31, by the Rev. H. Weston Allen, William James Dalby, chemist and druggist, of Canfield Gardens, Finchley Road, N.W., to Minnie, daughter of Mr. W. Dimond, Finchley Road, N.W.

Draffer—Blow.—At Christ Church, Pitsmoor, on September 9, Richard Arthur, son of Mr. Henry Draper, of Pitsmoor, to Annie Thirza, daughter of Mr. J. Blow, chemist and druggist, Heaton, Newcastle-on-Tyne.

MEEKE—EPPS.—At All Saints' Church, Norwood, on September 6, William, youngest son of the Rev. James Meeke, of Whitecross, Vevey, Ireland, to Bessie, second daughter of the late Mr. James Epps, jun., of Beulah Hill, Norwood.

Wheeler—Jones.—At St. Matthew's Church, Bayswater, on September 6, by the Rev. H. Brown Gold, M.A. (uncle of the bride), assisted by the Rev. Alfred Atkinson, Francis West, second surviving son of the late Mr. John Jackson Wheeler, J.P., Chelsea, to Margaret Annie, only daughter of Mr. Edwin Jones, chemist and druggist, 108 Queen's Road, Bayswater, W.

Deaths.

Duggleby.—At Beverley, Yorks, on September 4, Mr. Septimus Duggleby, chemist and druggist, aged forty. Mr. Duggleby was well known to many pharmacists, he having represented Messrs. F. Schutze & Co., Southwark Street, S.E., in London and the south coast for about fourteen years. He was much respected by his principals, his colleagues, and his clients. The funeral took place at Leconfield on September 8.

IBBOTSON.—At Ash Villa, Ecclesall Road, Sheffield, on September 8, Elizabeth Harrison, widow of Mr. Joseph Ibbotson, chemist and druggist, Ecclesall Road, Sheffield, aged seventy-eight.

^{*} Abstract of a paper contributed to the Royal Society on May 24, and read June 8, 1905.

Legal Reports.

Trade Law.

Publishing Chemists' Almanacs.—A dispute concerning a chemist's almanac engaged the attention of the magistrates at Birmingham Police Court on September 8. The plaintiff was Frederick Goodrich, an Aston town councillor, and he summoned Messrs. Hudson & Son, printers, Birmingham, to show cause why they should not deliver up certain books, of the value of 12L, which plaintiff alleged to be his property. Mr. Hurst, for the plaintiff, stated that his client's business was that of publishing a clemist's almanae. Mr. Goodrich obtained advertisements from chemists, and employed the defendants to print and publish the almanae as a matter of convenience. Plaintiff claimed that he was the absolute proprietor of the almanae. Latterly differences had arisen between the parties about financial matters, and the defendants had refused to give up various books relating to the business. These books, plaintiff claimed, belonged to him, and he asked the Court to order the defendants to deliver them up. The almanae was lightened by literary matter, and this Mr. Goodrich supplied. He had a room at Hudson's for his exclusive use. When he asked for his books, all he got was a table and a chair which belonged to him. Mr. Hargreave, for the defence, said that the proprietorship of the almanae was in dispute, and contended that the court had no jurisdiction, as the value of the books was more than 15l. The court upheld the objection and made no order.

Sale of Food and Drugs Acts.

CALCINED MAGNESIA.

At the Auckland Petty Sessions on September 7, George Mewes, shopkeeper, Spennymoor, was summoned for having sold a quantity of calcined magnesia which was not of the quality and substance demanded. The offence was admitted, it being stated that the only way the manufacturers could account for the deficiency was that the packer had made a mistake. The case was dismissed, on payment of costs.

TINCTURE OF RHUEARB.

AT Auckland Petty Sessions on September 7, Mary A. Berriman, shopkeeper, Spennymoor, was summoned for selling a quantity of tincture of rhubarb not of the quality and substance demanded. The inspector said he had received instructions from headquarters to ask the permission of the Bench to withdraw the case on the payment of costs. The Bench agreed.

Bankruptcy Report.

Re John Henry Kynaston, Roebuck Lane, Sale, Cheshire, Chemical Agent, etc.—The public examination of this debtor was held at Manchester on September 11, before Mr. Registrar Atkinson. The statement of accounts disclosed liabilities 3531. 7s. 7d., and assets 791. 17s. 8d. Replying to the Official Receiver, the debtor said he started business in November 1897. He had never ascertained the amount of profit he made in his business, but he always made a good living. He ascribed his failure to bad trade, losses by betting and insufficient capital. He considered that 150l. of his deficiency had arisen through betting in the last four years. He had kept day-book, cash-book, and ledgers, but had not propared any balance-sheets other than a rough statement produced to his principal creditors in July last. His liabilities to his principal creditor amounted to 2821. 9s. out of total liabilities of 353l. The examination was adjourned, and the debtor was ordered to file certain accounts.

Gazette.

Partnerships Dissolved.

Marchant. H., and Marchant. P. J., under the styles of H. Marchant & Son and Marchant & Son. Eastbourne, wholesale candle, salt, soap and soda merchants.

Philpots. J. R.. and Milner, V., Parkstone, Dorsetshire, physicians and surgeons.

Thompson, F. E., A.R.C.S., and Middleton, R. E., under the style of Thompson & Middleton, Walsall, analytical and consulting chemists.

The Bankruptcy Acts, 1883 and 1890.

RECEIVING ORDER.

Kent, Harry Musgrove Baker, Stafford, mineral-water manufacturer.

ADJUDICATIONS.

Bainbridge, Francis John, Bishopsgate Street Without, London, E.C., produce merchant and importer.

Crocker, George, Chryssell Road, Brixton, S.W., chemist, and druggist.

Kent, Harry Musgrove Baker, Newtown, Staffordshire, mineral-water manufacturer.

Hew Companies & Company Hews.

West Abber Co., Ltd.—Capital 3,000l., in 1l. shares. Objects: To acquire, exploit, and develop patents, inventions, concessions, licences, and rights, and to carry on the business of glass-bottle makers, etc. No initial public issue. The subscribers are to appoint a sole governing director.

SPARVELL & Co., Ltd.—Capital 3,000*l.*, in 1*l.* shares (1,500 preference). Objects: To adopt an agreement with H. J. Meredith, and to carry on, amongst others, the business of bakers, chemists, opticians, photographers, etc. No initial public issue. The first directors are: H. J. Meredith, C. F. Wright, and J. Stevens. Qualification, 100*l.* Registered office, College Stores, London Road, Camberley, Surrey.

Scottish Cyanide Co., Ltd.—Registered in Seotland with a capital of 50,000*l*., in 35,000 ten-per-cent. preference and 15,000 ordinary shares of 1*l*. cach. The object of the company is to take over and acquire the business now or lately carried on by the Scottish Cyanide Co., Leven, Fifeshire, now in liquidation, with its goodwill and property, and to carry on in the United Kingdom and elsewhere the business of manufacturers of cyanides and ferrocyanides. Registered office, Kirkland Works, Leven.

Works, Leven.

AURAL CLINIC, LTD.—Capital 500%, in 1% shares. Objects: To carry on the business indicated by the title and that of chemists, druggists, dentists, opticians, dealers in photographic materials, etc. The first subscribers are: G. R. Ford, The Parade, Walton Road, East Molesey, accountant; F. P. Clarke, 8 Mount Ash Road, Sydenham, S.E., clerk; W. H. Sherbrooke, 33 Cheston Road, West Kesington, W., law clerk; W. D. Owen, 150 Evering Road, Stoke Newington, N.E., gentleman; E. Baxter, 153 The Rye, Peckham, S.E., printer; W. Field, 5 Dawes Road, Fulham, S.W., clerk; and E. D. Mitchell, 42 Jedburgh Street, North Side, Clapham Common, S.W., clerk. No initial public issue. E. Thomas is the sole director. Registered office, 102 New Oxford Street, W.C.

W.C.

Dodd's Drug Stores, Ltd.—Capital 1,000l., in 1l. shares, Objects: To acquire the business carried on at 70 Tottenham Court Road, 146 Edgware Road, 35 Hampstead Road, 123 Judd Street, 121 Euston Road, and 310 Gray's Inn Road, all in London, by Henry Rous, and to carry on the business of chemists, druggists, drysalters, dealers in proprietary articles, manufacturers and vendors of photographic, surgical, and scientific apparatus and materials, etc. The subscribers are: Henry Rous, 3 Christchurch Avenue, Brondesbury, N.W., tailor; E. H. Rogers, 25 Bedford Row, W.C., clerk; G. Hand, 250 Green Lanes, N., manufacturer; L. F. S. Allen, 23 Portland Road, Finsbury Park, N., surveyor; T. Hine, 6 Argyll Place, W., woollen merchant; F. J. Rous, 30 Georgo Street, Hanover Square, W., tailor; and V. H. Gay, 61 Thornhill Houses, Barnsbury, N., chemist, No initial public issue. The first directors are Henry Rous, G. Hand, F. W. Hine, and V. H. Gay, Qualification, one ordinary share.

PRICE'S PATENT CANDLE Co.. LTD.—In presiding at the meeting of shareholders, held on September 8 at the Cannon Street Hotel, Sir Peter Spokes referred in feeling terms to the death of the late Chairman, Mr. Wright, who had presided over the destinies of the company for forty years. The report (see C. & D., September 9, p. 436) was adopted, and a resolution of condolence with the family of the late Chairman was also passed.

A BURLY Scot, being much run down, consulted an English doctor as to a remedy. After a careful diagnosis the doctor prescribed "No red meat, no whisky, and only one pipe a day." With a surly frown the Scot clapped on his bonnet. "Wait a bit," says the doctor; "you've forgotten something." "And fat micht that be?" "My fee." "Fee! Fat for?" "My advice." "A'll no be for takin' yer domned advice," said the disappointed Scot, as, with a dour look, he strode out of the room, leaving the doctor to meditate on the principle of payment by results.

Information Wanted.

Inquiries for the names and addresses of manufacturers, or other trade information, not traceable by reference to the advertise-ment-pages of "The Chemist and Druggist" and the "C. & D. Diary," or not filed in our private register, are inserted here free of charge. Postcard or other replies to any of the subjoined inquiries (addressed to the Editor "The Chemist and Druggist," 42 Cannon Street, London, E.C.), will be esteemed.

63/15. Who makes "Cloacina" toilet-paper?

61/96. "Ideal" feeding-cup: who are the makers?

58/39. Austin's "Ascatco": where obtainable or what is it?

62/6. Makers of "Zerene," supposed to be a German preparation.

63/74. Who are agents for or makers of "Broncaliun," a sea-sickness preventive?

Trade Motes.

Messrs. John Phillips & Sons, sponge importers and merchants; are to have a special exhibit of sponges at the Grocers' Exhibition next week.

Messrs. Hooper & Co., 7 Pall Mall East, London, S.W., intimate in this issue that they are sending samples and quotations of their hot-water bottles post free to any enquirers.

Messrs. Franz Fritzsche & Co., of Hamburg, who have a world-wide reputation as distillers of essential oils and manufacturers of synthetic perfumes, offer to quote prices to large buyers of these products.

"EUTHYMOL" TOOTH-PASTE.—Messrs. Parke, Davis & Co., 111 Queen Victoria Street, London, E.C., offer to supply to retailers of this popular dentifrice tooth-brush envelopes with their own name and address upon them.

HOT-WATER BOTTLES are now getting seasonable, and with that in view Messrs. Burge, Warren & Ridgley, Ltd., Great Saffron Hill, London, E.C., quote this week for various sizes, each bottle being enclosed in a neat paper bag.

A DIPLOMA WITH A SILVER MEDAL—the highest award—has been obtained by the Collins' Eucalypti Remedy Co., Ltd., 31 Newington Causeway, S.E., for their exhibit of eucalypti products at the Colonial and Indian Exhibition at the Crystal Palace.

"EVELINA" HYGIENIC FEEDER.—Messrs. Shirley Bros., Ltd., Whitecross Works, Rockingham Street, London, S.E., makers of this feeding-bottle, which retails at 1s., offer to send three dozen, carriage paid, for 20s., to the first 200 chemists in England and Wales who reply to an advertisement in this issue.

CHEMISTS' LOZENGES and other confectionery are offered by Messrs. Ayrton, Saunders & Kemp, Ltd., Liverpool. They include cachous, pastilles, boiled sugars and toffees, ready put up in tins or bottles, and also in handsome recessed-label bottles, as to the supply of which particulars are given in the advertisement.

"Sublamine" is the name of a synthetic antiseptic manufactured by Schering & Co., whose wholesale agents are Messrs. A. & M. Zimmerman, 3 Lloyd's Avenue, London, E.C. It is an ethylene-diamine compound with mercuric sulphate. Its special advantage as an antiseptic is that it does not coagulate albumen or attack instruments.

CLARK'S "SYPHON" STOVES well maintain their reputation as a convenient means of heating pharmacies, the stoves at the same time being an attractive feature. They are so constructed that the products of combustion are absorbed by water and are carried into a receptacle for the purpose without going into the atmosphere. Messrs. S. Maw, Son & Sons are wholesale agents for the stoves.

Zenobia Books.—We have received a collection of illustrated literature dealing with "Zenobia" perfumes and soaps from Mr. W. F. Charles, of Loughborough. The first is a retail price-list, which Mr. Charles is circulating largely among the general public. Another neat little booklet may be distributed indiscriminately, but the trade list is for retailers only. A "sweet" little showcard for counter use

effectively displays the virtues of "Zenobia" sweet-pea blossom. It is purposely made small and neat so that it may not hide other goods on the counter, but larger, nicely hand-painted showcards may be had if desired. All are excellently "gotten up"—as the Americans have it—and will prove a not unenviable addition to any pharmacy.

VINOLIA SPECIALITIES.—Two new price-lists have come to hand from the Vinolia Co., Ltd., of Malden Crescent, N.W. One, the general list, is quite a new departure, with a green, blue and gold cover picked out with red print, the size being 10 in. × 12½ in. The printing is excellent, as in all the Vinolia lists, the type being bold and the blocks clear. This list gives prices and full particulars of the Vinolia preparations, but in order to give their clients every opportunity of judging of the appearance and style of their new products a supplemental book has been produced dealing entirely with Vinolia perfume-caskets. In this production illustrations of the caskets are reproduced on surface paper by the three-colour process. Copies may be obtained en application to the company.

"Neptune" Clinical Thermometers.—These are English-made thermometers, placed on the market by Mr. Norman Will, 110 Cannon Street, London, E.C. They are manufactured from unalterable Jena glass, are guaranteed not to run back, and can be reset instantly. They are made



with ordinary and lens fronts, are quick setting, and worth the attention of retailers, wholesalers, and exporters. Mr. Will also offers "Neptune" veterinary clinicals with Professor Holiday's scale, which shows the normal temperatures of man, lorse, cow, dog, cat, pig, sheep, and fowl. This thermometer sells readily wherever it is shown.

Business Changes.

Properly authenticated business notices (not being advertisements) are inserted in this section free of charge if promptly communicated to the Editor.

Messrs. Ellis & Co., dispensing chemists, have opered new premises at 126 The Grove, Stratford, E.

Mr. S. Rogers, chemist and druggist, has disposed of his business at 1 Crowndale Road, Camden Town, N.W.

Mr. A. Lee, chemist and druggist, Torquay, informs us that he has not purchased a business at Brixham.

Mr. W. A. Townsend, chemist and druggist, has purchased the business of the late Mr. F. Barry at Westbury-on-Trym.

Mr. C. E. Pickering, chemist and druggist, has relinquished the business at 12 James Street, Westbourne Terrace, W.

Mr. G. M. Martyn will open a chemist's business, as soon as the necessary fittings are complete, at 45 Longbridge Road, Barking.

Mr. B. C. Hodgson, chemist and druggist. Halifax, has opened a well-appointed pharmacy at Salterhebble, a thriving suburb.

Messrs. Randall & Sons, dispensing chemists, have given up the business they recently opened at 177 Plashet Road, Upton Park, E.

Mr. W. Morris, chemist and druggist, 244 High Road, Willesden Green, N.W., has opened branch cash drug-stores at Leeland Road, West Ealing.

Mr. T. H. H. Francis, chemist and druggist, has purchased the business of Mr. M. M. Woodward, pharmaceutical chemist, at 53 London Road, Reigate.

Mr. J. K. Harvey, chemist and druggist, of St. Mark's Road, Balham, has taken over the business of Mr. F. E. White at 4 Mitre Terrace; Tooting, and will carry it on as "White's Drug-stores."

Mr. Jacob Benyon Thomas, chemist and druggist, has taken over the business carried on at Burgh. Spilsby, by Mr. J. W. Dawson, and the off-wine and spirit licence attached to the business has been transferred to Mr. Thomas.

Personalities.

MISS R. A. CASSON has been appointed dispenser to the Aston Union.

Mr. A. M. Stewart, who has managed the British Dispensary, Singapore, during the past four years, arrived in London on Tuesday, and will remain here for a few days. He may be addressed at the C. & D. Offices, 42 Cannon Street, E.C.

In recognition of the services rendered by Mr. Percy J. Ashfield, chemist and druggist, to the town of Rhyl it has been decided to make a public presentation to him. Mr. Ashfield is about to relinquish the management of the Palace at Rhyl.

Owing to failing health Mr. M. J. Lindsey, of Lindsey & Sons, surgical instrument makers, of 32 Ludgate Hill, E.C., has resigned his position as a Common Councillor of the City Corporation, where he has represented the Ward of Farringdon Within since 1866.

LIEUT.-COLONEL PHILLIPS, of Bombay and Poona, whose death was recorded in our last issue, has left a widow and two sons and a daughter. Mr. Phillips was a Pembrokeshire man, and was apprenticed to Mr. Jones, chemist, Clynderwen, whose business is now carried on by Mr. H. Morris.

J. H. W. HART (17). son of Mr. J. Hart, chemist, R. U. Hospital, Malta, passed the Senior Oxford Local examination in July last, bracketed eighteenth in First-class Honours list. and thirteenth with distinction in Latin. His brother, C. J. W. Hart (15), in July last year passed the Junior Oxford Local examination, bracketed sixth in First Class Honours list, with four distinctions.

Mrs. R. Fred Reynolds, wife of the well-known Leeds pharmacist, who conveys so much amusement to our readers through his pencil, has just published another novel entitled "A Quaker Wooing." She has two others in the press. One, entitled "The Making of Michael," is to be published by Mr. George Allen. The third, which she has just completed, is entitled "In the Great Silence," which Messrs. Hurst & Blackett are to publish. Mrs. Reynolds has steadily made her way amongst modern novelists, and her books are growing in popularity.

The Meek's Poisonings.

N^O fewer than twenty-five deaths by poisoning have occurred during the past week, three being misadven-Five of the deaths, including three of a total four of misadventures, were caused by hydrochloric acid. It was taken in mistake for whisky by John Joseph Smeaton (26), a Newcastle machineman, and by Mary Gemmel (47), of Gateshead. Amelia Watson, of Fulham, took it with the purpose of committing suicide, and it was also swallowed with the same intent and success by Elizabeth Kemp (58), of Great Titchfield Street. The third misadventure was at Pentonville Road, where the wife of a brassfinisher, named Geen, used it instead of sauce. At the inquest on the woman the husband stated that some eighteen months ago he bought sixpennyworth of spirit of salt at an oil-shop in his neighbourhood, it being supplied in a "white" bottle labelled "Poison." He used it in his work for soldering-purposes; but as it was of full strength he "doctored it down" and put a portion in a sauce-bottle in the kitchen cupboard. His wife evidently got hold of the wrong bottle. The Deputy-Coroner remarked to the jury that under the Pharmacy Acts persons selling poisons were required to adopt special precautions. Above all, the bottles had to be properly labelled with the name and address of the seller and the nature of the poisons. Many poisons were sold in "oil-shops" in the ordinary way of trade without any restrictions whatever. At one time car-bolic acid used to be sold in a most reckless manner; but owing to the number of deaths from suicide, accident, and misadventure, coroners' juries recommended that it should be placed in the second schedule of the Sale of Poisons Act. In the result the Privy Council issued an order embodying special precautions in connection with the sale of carbolic acid, and the effect was seen in the greatly reduced number of deaths from "suicide, accident, and misadventure" by

its use or abuse. According to the Registrar-General's latest returns respecting deaths from poisoning, spirit of salt was shown to be the cause of 983 in the twelve months, 404 being due to accident or misadventure and 579 to suicide. Those alarming returns clearly showed that it was time that some special precautions should be taken to place such a dangerous, really deadly, poison under legislative control. The jury added to their verdict of "Death from misadventure" a recommendation in favour of greater security being afforded to the public in the sale of spirit of salt and other poisons used in ordinary work; that they should be only supplied in specially fluted bottles properly labelled; and that in all cases the names of the sellers should be distinctly exhibited, together with the recognised names of the contents of the bottles.—The only other death from an unscheduled poison was that of William Jonas Ireland, of Parkfield Nurseries, Slyne, Lancaster, who died from camphor-poisoning. At the inquest on Ireland, Dr. Collingwood Williams, the county analyst, reported that he found the equivalent of 71 grains of camphor in the stomach. A tin of vaporising fumigator, such as deceased used to fumigate his plants, was produced. It was said to contain camphor.-Six deaths occurred from carbolic-acid poisoning, the victims -all suicides-being Robert Haskell, of Netley; Charles Light, of Chalbury, near Wimborne; John Clifford Huckle, a boy of sixteen, assistant to a grocer at Luton; a young Swansea woman named Elizabeth Thomas; a labourer at Acton; and a man at Montrose.-Laudanum secured five victims: Joseph Wade, a Bradford hawker; Alexander Jackson, a Glasgow joiner; Francis Bowers, a Belfast shipping-clerk; Thomas Vincent, a brewer's traveller at Grantham; and another commercial traveller, also at Grantham, named Rodom. At the inquest on Vincent it was stated that the laudanum was purchased from Mr. J. Newcome. The bottle was a 4-oz. one and was properly labelled. The Coroner said that it was a pity that people should be allowed to sell over the counter so much poison as that; at the same time, if a man was determined to poison himself he could obtain a little from several chemists and mix it himself. As the law stood, Mr. Newcome was perfectly within his rights to sell any quantity of laudanum. He did not know whether any questions were asked. Λ juror remarked that the deceased would not be a stranger to Mr. Newcome, and the Coroner said even if he was a perfect stranger Mr. Newcome would be quite within his rights as the law was. Mr. Newcome, jun., in his evidence. said no questions were asked, whereupon the Coroner remarked that apparently if one wanted a bath of laudanum there would be no difficulty in procuring it. He had hoped that Mr. Newcome, knowing how dangerous it was, would have taken the precaution of asking what it was for.— Oxalic acid was taken by Louisa Frances Robertson (61), of Upper Holloway, and by Thomas Finlay, an out-of-work horse-keeper, at Fulham. Herbert Philip Davis (46), described as a chemist, of 27 Leyton Road, Stratford, died from an overdose of morphia, "accelerated by the swallowing of his false teeth." An unknown man poisoned himself on Clapham Common with potassium cyanide rather than go into the workhouse. Edmund Johnson, a surgeon's unqualified assistant, poisoned himself with prussic acid at Manchester. Strychnine was the poison used by William James Parsons, a Wilmington farmer, to end his life. Mrs. McGowan, wife of the Rector of Nevendon, a remote village in Essex, poisoned herself, for some unknown reason, with a poison the nature of which has not yet been ascertained.

Recent Will.

COOKE.—Mr. Francis Hewlings Cooke, Stoney Thorpe, Radford Road, Leamington Spa. retired chemist, for many years in business at Redcar, Yorks, who died on August, 4, left estate of the value of 5.7751. 12s. 3d. gross, of which 3,5221. 9s. 1d. is net personalty. Probate of his will, dated May 10, 1895, has been granted to his widow, Mrs. Sarah Jane Cooke, and his brother. Mr. Joseph Fryer Cooke, stationer and printer, Loftus in Cleveland. The testator bequeathed to his wife the income from his residuary estate for life, with the use of his household and personal effects, and the ultimate residue of his estate to his two daughters, Lily Gertrude and Florence Emily, providing that, should one of these daughters be a spinster or widow at his wife's death, she is to have 12 per cent. more than the other.

Medical Gleanings.

MARMOREK'S SERUM FOR TUBERCULOSIS.

Dr. Harold F. Bassano reports in the "Lancet" upon five "surgical" cases of tuberculosis in which the serum has been used with considerable benefit. We gather that the serum is not yet a commercial product.

TREATMENT OF RINGWORM OF THE SCALP.

Dr. Gavin Stiell (Clapham) states in the "British Medical Journal" that he has treated a few cases with success in the following manner: Thoroughly rub benzoline into the affected parts with a piece of cotton-wool; then with a clean piece of cotton-wool rub in a weak solution of perchloride of mercury; after this rub in thoroughly salicylic-acid ointment. The benzoline and perchloride of mercury should only be used for from three days to one week, according to the severity of the case, the salicylic-acid ointment alone being used to finish the treatment.

HAY-FEVER POISON.

Prausnitz ("Berliner Klin. Woch.," 42, 227) has investigated the constituents of pollen, with a view to determining the nature of the constituent which produces hay-fever. He finds that a substance can be extracted by weak brine and precipitated from this solution by alcohol which is capable of producing all the symptoms of hay-fever. It gives the reactions characteristic of proteids, and is probably closely allied to these bodies.

INEBRIETY A DISEASE.

Dr. McAdam Eccles and other correspondents of the "Lancet" consider that inebriety is a disease, and should be treated by medical men. The Rev. Richard Free, of Millwall, says medical men have held aloof from a preventive and curative work in which they should have been foremost, and he is convinced that if any real advance is to be made in curing patients suffering from the disease of intemperance it will be made only on scientific lines by persons scientifically trained.

CURING HAY-FEVER.

PROFESSOR DENKER, of Erlangen, has made a series of further experiments with Professor Dunbar's hay-fever serum, by vaccinating hay-fever patients with the serum, and he regretfully ascertained that the remedy did not always produce the desired effect. He resorted to another mode of treatment, consisting in a massage of the mucous membrane of the nose, which must first be rendered insensible by cocaine. The massage is made by means of a probe covered with cotton, once a day, two to three minutes for each nostril. The results so far have been very encouraging, and the favourable effects have lasted for one year.

OPERATION ON THE LUNG.

MR. H. HAMILTON RUSSELL, F.R.C.S., Melbourne, Vic., has communicated to the "Lancet" particulars of the case of a boy of twelve who swallowed a pin 2½ inches long with bead head, which got so far down into the lung that it could not be removed by the throat. Mr. Russell therefore operated; removing 6 inches of the eighth rib, puncturing the pleura, and making a small incision through the lung, a pair of forceps was introduced, and the pin grasped and removed. The boy made an excellent recovery, and left the hospital in twelve days. We mention the case because operations on the lung are uncommon, and as this operation would have been impossible without radiography.

Dangers of Mercurial Cintment.

Dr. Alfred Wightwick reports to the "Lancet" (p. 763) a case of mercurial poisoning in which severe skineruption and irritation, as well as other constitutional symptoms of a distressing nature, followed. The case and cause are thus noted:

The patient, who had apparently been invaded by pediculi pubis, the infection extending to the axillæ, had freely applied ointment of mercury, using the contents of four boxes, each holding about three drachms two scruples, in the course of three or four days.

boxes, each holding about three drachms two scruples, in the course of three or four days.

If the B.P. ointment was applied, the case is a splendid proof that it should not be sold as a parasiticide; if the mild ointment was used, the facts are still more strongly against the official preparation. The case should be kept in mind for Sale of Food and Drugs Acts purposes.

TEETHING.

The issue of the "British Medical Journal" for September 9 was largely occupied by reports of the papers read and remarks made upon them in the Dental Section of the Association at the last annual meeting. These were largely devoted to teething, and it is interesting, in view of the Board of Inland Revenue's ruling that teething is a human ailment, to quote what our contemporary says in summing up the discussion:

The discussion served to define the modern attitude towards "teething." There are reflex troubles apparently dependent on "teething" alone, but the concomitant conditions are all-important. It is not teething that induces gastro-intestinal catarrh, but gastro-intestinal catarrh that induces painful teething. The mouth as a part of the intestinal tract suffers at the same time as the stomach and intestines, and the tooth erupts through a gum already tender. The intestinal catarrh is to be attributed to dirty milk or other improper food. Similarly, convulsions are common in rickety children, and the slight reflex disturbance of cutting a tooth in an unhealthy child may determine a fit at that time; the complete eruption of the tooth is, however, seldom followed by immediate cessation of the fits. The gastro-intestinal condition is, again, of great importance. At present it is not proved that "teething" by itself can give rise to pyrexia. Some such sequence as the following would go far to establish the claims of "teething" as an important factor in the production of children's ailments. Following pyrexia comes a failure of secretion of digestive fluids; local irritation of the gums causes food to be bolted, and the child's fretfulness is ascribed to hunger; more food is given to keep the child quiet, and the whole process ends in gastro-intestinal catarrh and diarrhea. Teething is a normal process, but, like any other normal process, it may be deranged.

While this supports our contention that teething per se is not an ailment, the revenue authorities will probably reply that it is the troubles that afflict the teething child that they think of as teething.

Practical Motes

CALOMELOL.

This new remedy is stated to be a combination of 75 per cent. of mercurous chloride and 25 per cent. of soluble albumenoids ("Apothek. Zeitg."). It is a greyish-white powder, tasteless and odourless, soluble in water to the extent of 1 in 50, the mixture being opalescent. It is insoluble in alcohol, ether, or chloroform. Calomelol is used externally as a dusting-powder and as an ointment.

POWDER FOR THE HAIR.

"Haarpoeder," a remedy prepared by a Brussels firm for hair-parasites, is a white, odourless, crystalline powder, almost completely soluble in water, and in which salicylicacid and boracic-acid reactions may be recognised. The quantitative analysis gave (in round figures)—

 Salicylic acid ...
 ...
 ...
 5 per cent.

 Boracic acid ...
 ...
 ...
 50 per cent.

 Borax ...
 ...
 ...
 45 per cent.

MIST. BROMO-CHLORAL. Co.

 Chloral hydrate
 25 grams

 Potassium bromide
 25 grams

 Extract of Indian hemp
 0.2 gram

 Extract of henbane
 0.2 gram

 Strained honey
 60 c.c.

 Water to
 100 c.c.

Triturate the chloral hydrate and extracts with a small quantity of honey to dissolve, separately dissolve the bromide in the water (20 c.c.), add the honey to it, then the extract mixture. Keep in a dark place.—A.Ph.A. Proc., 1904.

COLOURED FRUIT-SYRUPS.

At the present time, when damsons and plums are cheap, chemists should make stocks of syrups from them for the purpose of colouring cough-mixtures and other specialities. Both give very rich red-coloured syrups with little trouble. In either case for each pound of the fruit (cut in two) take ½ lb. of sugar and 10 oz. of water, boil for half an hour, and strain while hot upon another half-pound of sugar, dissolve, and make up to 24 fl. oz. with boiled water. A similar finely coloured syrup may be made from blackberries (brambles), the colouring in all these cases being richer than cochineal.

Sheffleld Guardians' Dispensary.

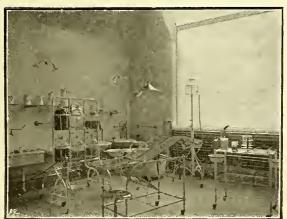
THE Sheffield Board of Guardians are well known as an up-to-date and progressive body in Poor-law matters generally, and their dispensing arrangements and method of themselves providing medicines for the sick poor, instead of through the district medical officers, are modelled on sound lines. They are at present putting the finishing touches to a scheme for separating the workhouse hospital



THE DISPENSARY.

from the other part of the institution, and running it on distinct lines. Towards this end they have erected a new administrative block at a cost approaching 50,000l., this including a dispensary and operating-room. Mr. H. Anteliffe, the head dispenser, and his assistant, have just removed into the new dispensary, which is splendidly fitted up and is well lighted from the roof; the fittings throughout are of mahogany, with teak tops, and were supplied by Messrs. Evans Sons Lescher & Webb, Ltd. The storeroom lies to the left of the picture, and the room at the door of which Mr. Anteliffe stands is a comfortable little office, provided with a roll-top desk and telephones conelectric ventilating fan will help to keep the temperature down in times of pressure. A waiting hall is attached, to avoid the hospital servants having to come into the dispensary, and further stores are provided in the basement, side by side with the soda-water plant. The soda-water machine is a good investment, a gross of large syphons being turned out every day during the busy times.

The operating-theatre is fitted with all the latest appliances that science can suggest. There is a first-rate



north light by a large window running into the roof, the walls are enamelled white, and the electric-light fittings

include a fine portable light. The sinks are fitted with elbow-action taps, etc., and a Berkefeld filter with a heat regulator gives cold, tepid, and hot water from the same tap. Air is admitted through a filter of antiseptic wool, with a regulator for warming and regulating the tempera-ture. The fittings for the theatre and the sterilising and other rooms attached thereto were supplied mainly by Messrs. Down Bros.

The sterilising-room is fitted with an electric instrumentsteriliser and also a high-pressure steriliser. An efficient bacteriological laboratory is also attached. The new buildings are a credit to any public body, and much of this is to be attributed to Mr. G. T. W. Newsholme, F.C.S., Chairman of the Hospital Committee.

Mew Books.

These notes do not necessarily exclude subsequent reviews of the works. Any of these books printed in Great Britain can be supplied, at the published price, to readers of this journal on application (with remittance) to the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Hersehell, G. Indigestion. Diagnosis and Treatment of Functional Derangements of Stomach. Appendix on Preparation of Food, etc. Third edit., entirely rewritten. 84×5½. Pp. 300. 5s. net. (H. J. Glaisher.)

Jaksch, R. v. Clinical Diagnosis: Bacteriological, Chemical, and Microscopical Evidences of Disease. 5th English edit. by Archibald E. Garrod. 9½×6½. Pp. 628. 24s. net. (Griffin.)

Martin, G. Researches on the Affinities of the Elements, d.c. Roy. 8vo. 16s. net. (Churchill.)

National Standard Dispensatory. Covering the United States Pharmacopeia, 1900 revision. By H. A. Hare, B.Sc., M.D., Charles Caspari, jr., Ph.G., Phar.D., and Henry H. Rusby, M.D. Imp. 8vo. 1,858 pages. Cloth, \$7.25. (Lea Brothers & Co., Philadelphia.)

Pannell's Reference-book for Home and Office. Pp. 984. 6s. 6d. net. (The Granville Press, Ltd.)

Pratt, Anne. Flowering Plants, Grasses, Sedges, and Ferns of Great Britain, and their Allies, Club-mosses, Horsetails, dec. Vol. 4. New edit. rev. by Edward Step. 9% ×6%. Pp. 228. 10s. 6d. net. (Warne.)

Sessions, H. Cattle Tuberculosis. Practical Guide to Agriculturist and Inspector. 2nd edit. $7\frac{1}{2} \times 4\frac{3}{4}$. Pp. 128. 3s. net.

(Baillièro.)

"The Doctor Says"-What Docs the Doctor Say? Book of advice for household, with practical hints for preservation of health and prevention of disease. $7\frac{1}{2} \times 4\frac{3}{4}$. Pp. 316. 38. 6d. net. (Appleton.)

TRADE TABS.

THE exports of chemical products from Algeria during 1904 amounted in value to 56,2001.

ONLY 52 tons of sulphate of copper was received at Zante last year, compared with 601 tons during 1903.

THE production of arsenie in Cornwall last year amounted to 827 tons.

Russian Aniseed.—The exports from Riga during 1904 amounted to 242 tons, against 160 tons in 1903, and 420 tons in

Among the exports from Candia during 1904 were olive oil valued at 45,600%, honey 1,200%, wine-lees 2,200%, and soap 25,450%.

THE exports of quicksilver from Libau during 1904 amounted to 266 tons, against 315 tons during 1903, and 330 tons in 1902.

The imports of sulphate of copper into Algeria during 1904 amounted to 62,257 ewts., valued at 58,480l., principally from the United Kingdom.

The imports of chemicals and medicines at the port of Suez during 1904 amounted to 46,0391.E. against 47,4321.E. during 1903; the exports of similar goods during 1904 wero 6,8911.E. and 10,4201.E. in 1903.

THE imports of drugs and chemicals into Crete during 1904 amounted in value to 16,9691., against 15,4041. during 1903; and the exports amounted to 36,7851. during 1904, against 37,1591. in 1903.

THE exports from Tahiti during 1904 amounted in value to 15,969l., against 23,424l. during 1903, 47,417l. during 1902, and 43,912l. during 1901. Recently some new vines from Mexico have been introduced into Tahiti.



1'O CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

Opening Pharmacies on Sundays.

SIR,—I notice in your issue published to-day that a suggestion is made by your contributor "Xrayser" that pharmacists should open their establishments in turn on Sundays. May I point out that such an arrangement has been put in force by the Exeter Association of Chemists and Druggists for the last four years, and has been found to work admirably? I shall be happy to give full particulars to the secretaries of any local associations who may desire such.

I am, yours faithfully,

H. WIPPELL GADD,

Hon. Sec. Exeter Association.

100 Fore Street, Exeter, September 8.

Lemongrass Oil-vield.

SIR,—In your paper published on September 9 we notice a paragraph from the Trivandrum correspondent of the "Madras Times," stating that 5,000 gals. of lemongrass oil was expected from a plantation of 200 acres. We think there must be some mistake in the quantity mentioned, as we do not think it possible that 200 acres could give such a large quantity. We may mention, in confirmation of our surmise, that we have just received estimates from a planter in India who is anxious to open land to work lemongrass oil, and he estimates that ten bottles (each bottle containing about a quart) per acre would be a very fair yield; this would give for 200 acres, say, 500 gals.—a very different quantity from that mentioned in the paragraph referred to.

Yours faithfully,

Peirce, Leslie & Co., Ltd.

London, September 13.

"The Biggest Catch we've Had."



A Reading correspondent (152/20) sends the above sketch as a suggestion for one of our artists, but being by a chemist we give it in facsimile. The fisher appears to be Mr. W. S. Glyn-Jones, Secretary of the Proprietary Articles Trade Association. On the bank lie Scott's, Iron Ox, Blair's, Eade's and Carter's, the last having W. P. P. Co. attached to it. Seigel's has just been hooked, and as Mr. Glyn-Jones is fishing without gaff or landing net, he may have trouble in getting the big fish to the bank. The fish which hover round the bait are Kay's, Dinneford's, Fellows', Eno's, Steedman's, Doan's, and Cuticura. On the private fishing-ground Mr. Self Protection has landed Elliman's, Owbridge's, and Angier's, while Mellin's is depicted as being half way on the bank.

The Practice of Pharmacy in Glasgow.

SIR,—I note in your issue of September 2 a reference to the rights of the Faculty of Physicians and Surgeons of Glasgow over the practice of 1 harmacy in Glasgow and the West of Scotland. As you say, these rights are only

curiosities. The Faculty have no intention of exercising them. In fact, the Faculty would seem to be as ashamed now of their relationship to pharmacy as formerly they were of that of the barber. Your [i.e., "Xrayser's"] reference to Queen Elizabeth's formula and a Tudor charter is hopelessly out of place. The Tudors were never kings in Scotland. Your correspondent ("F. F. P. S. G.") should propose to the Faculty a resumption of their rights in examining and granting a qualification in pharmacy. I am inclined to think he would get very little support from the Fellows. This is apart altogether from the legal position involved.

Yours faithfully, Another Fellow of the Glasgow Faculty of Physicians and Surgeons. (62/58.)

The Origin of Life.

SIR,—The interesting articles that appeared in your issue of September 9 on the above-named subject suggest a question whether the experiments of modern scientists do not somewhat resemble those of the ancient alchemists, or would their success (if attainable) prove of great value to the world? Nowadays it is acknowledged that no event in the economy of Nature occurs without a cause; it therefore follows that there must exist a controlling intelligent power possessing the faculty of preordination. Heat, light, and possessing the faculty of preordination. Heat, light, and electricity act with irresistible force and certainty, but how they affect the media oxygen, hydrogen, and carbon is a mystery that the loftiest stretch of human intellect cannot explain. It appears to me that any attempt to realise the unknowable deprives those who devote their mental faculties to such abstract and elusive subjects of the greatest pleasures of life, derivable from converse with Nature in her inviting loveliness. The amiable clergyman, Gilbert White, ascribed his cheerfulness, even in old age, to habits of observation of the common objects of country life, which he recorded day by day. The "Natural History of Sel-borne" has passed through many editions, and is read by thousands in every quarter of the globe. As a grim contrast to the unpretentious natural philosopher, I may be allowed to quote a tale read during my boyhood.

A certain eminent German anatomist conceived the notion of penetrating the mystery of life. Shutting himself up in a house, he set to work experimenting on various animals. At length it was remarked that all indications of activity had ceased, and the house was forcibly entered. What a scene presented itself! Apparatus of complicated structure, specimens of parts of animals preserved in spirit, and piles of manuscripts and diagrams, attested the industry of the savant. In a loft, suspended from a beam, were the remains of the unfortunate man, half devoured by rats. Upon the coat-sleeve was pinned this lamentable confession,

written in tremulous characters:

For three years I have been constantly engaged in searching for the source of life, but without success. With failing eyesight, and no longer able to direct a scapel, I yield to the inevitable, leaving no one to lament the loss or a child to curse me for his existence.

The tendency of unremitting attention to any abstract or clusive subject is towards dementia—a significant fact, proved by the returns of all lunatic asylums.

Faithfully yours,
Deal, September 11. R. Goodwin Mumbray.

The Kinninmont Prize Scheme.

SIR,—As you are aware, a prize scheme was initiated some eight years ago to keep fresh the memory of the late Mr. Kinninmont, of Glasgow, subscriptions having been given freely by local pharmacists to that end. A committee was appointed to control the scheme, but of recent years it has done nothing but deplore the lamentable dearth of candidates for the prize. In fact, the scheme would have quietly died had it not been useful in a certain quarter for advertising-purposes. The subjects of examination are unpopular and too ridiculous for energetic young men who would study, but not for the Major. Magnetism and electricity, even for a Major man, are pretty much a farce, yet they are made the subject of the examination. The committee has helped to kill the competition by its inactivity. It does not appeal to local students. For years I, who come in contact with many clever youths, have received no communication from them. This year I find but one notice (six lines in the C. & D. of March 4) intimating there is such a

I am still looking for the thing as a Kinninmont Prize. official announcement telling that the competition has taken the reading of advertisements. This year I believe there was one candidate, and he was awarded the prize (C. & D., July 29, p. 160). The committee loves silence. Prospective candidates cannot see the questions set at previous examinations because they are not sent to the trade journals. They are referred to the syllabus instead and told it is enough. Those who know anything of examinations know also that the best preparation is a study of the questions already set. The committee do not state who is their examiner in botany and magnetism and electricity. For years it was Mr. Hill, and he is popularly believed to have set the last papers and corrected them too. I submit, with all respect to Mr. Hill, that this examination should be conducted by professional teachers—say Professor Traill for botany and some other professor for magnetism and electricity. Personally I favour different subjects altogether, as the present two are hateful to most prospective candi-The secrecy in which the whole examination is endates. shrouded makes it no honour to gain the Kinniumont Prize: it is only a material gain of gold. I have criticised destructively, and I now offer some constructive suggestions, viz: (1) the present committee should resign and make way for a new committee of more energy; (2) being a public trust full publicity should be sought, i.e., questions set should be published, the number of candidates entering made known, and the names of examiners; (3) prize only to be awarded when a sufficiency of marks is obtained. In this way to gain the Kinninmont Prize would be an honour indeed, and the fair fame of Mr. Kinninmont would be added to.

Yours faithfully. 157 St. Vincent Street, Glasgow. THOS. S. BARRIE.

Letters in Brief.

SEABURY & JOHNSON AND THE RED CROSS.—Messrs. Scabury d Johnson, New York, write in regard to our report of the action Johnson & Johnson r. Seabury & Johnson, respecting absorbent cotton or gauze, in which we stated on July 22 that Vice-Chancellor Bergen had granted the plaintiffs application for an injunction (the terms of his judgment being iven verbatim in our issue of August 19, p. 346). Mcssrs. Seabury & Johnson now say:

"It is a fact that up to and including July 22 last past August 5 last past Seabury & Johnson secured by signature of the same Judge, Vice-Chancellor J. J. Bergen, Court of Chancery, State of New Jersey, a 'stay' suspending the operation of any such writ of injunction until our appeal to the Court of Errors and Appeals was finally disposed of according to law." according to law.

This simply confirms what we have reported, a stay of the injunction against them naturally following Messrs. Seabury & Johnson's appeal.

Legal Queries.

Before submitting queries in this department, subscribers are advised to consult the "C. & D. Diary," 1905, on General and Trade laws, p. 287; Pharmacy and Poison laws, p. 299, and Medicine-stamp Acts, p. 279. In respect to the last we can mark labels "Liable" or "Not liable" if they are sent in duplicate, and with a stamped and addressed envelope for return of the marked ones.

Full particulars in regard to trade-mark registration will be found in the "Diary," p. 240.

Salary (59/48).—It is generally considered in the retail drugtrade that an assistant is entitled to his salary during any temporary illness, but there is no legal decision on the point to support the supposition. It would not apply to incapacity due to an aecident for which the employer is in no way responsible.

J. M. D. H. (60/1).—If an unqualified man gets a prescripthe shop of a qualified chemist, paying for it in the ordinary way, and then sells it to the person who gave him the prescription, he infringes Section 15 of the 1868 Pharmacy Act in so far as he sells a poison.

Hypo. (60/96).—TRADE-MARK.—It is not unlawful to adopt a device for a trade-mark and call it "trade-mark" without registration, but it is to say "registered trade-mark." without

Perplexed Chemists (61/53).—The recent case re Calvert's Tooth-powder (see C. & D., July 29, p. 164) seems to be on all fours with yours, and the same remedy applies.

Dispensing Notes.

Eserine Solutions,

Sir.—I should esteem it a great favour if, through the medium of your valuable paper, you could tell me whether you have ever heard of an eye-lotion composed of

			week, one	
Eserinæ	sulph.			 gr. j.
Cocainæ	hydroch	lor.		gr. iv.
Aq. dest.	ad			 Ξj.

turning pink in colour after two or three days. The bottle was rinsed carefully with aq. dest. before dispensing, also the measures used.

Yours faithfully,
P. W. (59/46.)

[This is what generally happens with escrine solutions, the colour being due to formation of rubescrine through the action of atmospheric ammonia. It is prevented by the addition of a single drop of sulphurous acid or the same of 10-per-cent, hypophosphorous acid to the ounce of lotion.]

Zine Oleate in Hair-wash.

SIR,—I should be pleased if you would give me your opinion as to the correct way of dispensing the following hair-wash:

Zinci oleatis			 ξεs.
Ol. amygdalæ			 ξiss.
Acid. salicylic.			 ,5j.
Ess. bergamot.			 q.s.
Spt. vini rect. ac	d	***	 žviij.

Yours,

RHUBARB. (49/26.) [We have tried to compound the above as written in such a

way as to produce a presentable preparation, but have failed. The prescriber should be informed of the immiscibility of rectified spirit with almond oil, and that emulsification by addition of an alkali will neutralise the salicylic acid and decompose the zinc oleate. His best plan is to prescribe a spirituous lotion of salicylic acid for use at bedtime, and a cream of the cleate and almond oil for the morning tailet. cream of the oleate and almond oil for the morning toilet.]

Tar and Hazeline-eream.

SIR,-I shall be glad to know what you consider the best plan for dealing with the following:

Liq. picis earb.		,	 5ss.
Acid. salicylici		• • •	 gr. x.
Acid. tannici			 5ss.
Pulv. amyli			 5ss.
Hazeline cream	ad	1 * *	 51.

M. Ft. ung.

I have mixed the powders and rubbed down with the cream, adding the liq. picis carb. last, and have reversed the process by mixing the powders and rubbing down with the liq. picis carb., then adding the cream, but neither turns out a satisfactory ointment.

Yours truly,

HAZELINE. (55/54.)

[This is another ease of immiscibility. The tar solution will not mix with the cream. If the prescriber order anhydrous lanoline 5vj. and hazeline 5iss. a cream containing all the ingredients will result.]

Difficult Directions.

Velox (61/3) submits a copy of a prescription as follows: Aspirin. Pot. brom. gr. xv. ... gr. x.

Ft. pulv. j. Mitte xij.

The carbon copy of the directions looks to us like "s. t. d."i.e., take a powder thrice daily—which is the most reasonable deduction.

Filtering Mixtures.

SIR,-I want to ask you or any of your correspondents if it is permissible or strictly correct dispensing to filter mixtures containing tr. lavand. co., tr. valerian. amm., or any tincture which won't remain clear on dilution with water. I have had two cases lately where I have dispensed prescriptions where my customers have told me I must have made a mistake, as the my distollers have told he I must have made a instance, as the maxtures were previously perfectly bright in both instances from the same establishment. Of course I did not filter, and find out that I am looked upon as an unreliable dispenser, and have lost their patronage.

J. A. H. (61/48.)

[A rule on this point which may be generally applied is impossible. In some mixtures the separated matter is un-questionably active, and filtration is not permissible. In the above cases, however, the flocculence is due to separation of impossible. fatty matter, and the common practice in such instances is to filter. It is much to be regretted that the dispenser in the first instance does not indicate on the prescription by the word "colatur" that the mixture is to be filtered. In many cases the first dispenser is familiar with the opinions of the prescriber in regard to filtration. The only general rule for the dispenser is, "Do not secure elegance at the expense of therapeutic activity."]

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

Subscriber (Jamaica) (60/49).—The leaves which you send appear to belong to a plant of Campanulaceæ; but with such meagre material it is impossible satisfactorily to determine the botanical origin. We would suggest that a flowering specimen be submitted to the Director of the Botanical Department, Jamaica, who would doubtless readily furnish the desired information.

Once Bitten (60/7).—WRIGHT'S WINDOW-COMFETITION.—The exhibition of a piece of coal in a window, and awarding prizes to those who most correctly give the weight of the coal, is not a game of chance, and for that reason alone is not hit at by the Lottery Act; for it has been held in Caminada v. Hulton that where the element of skill is taken into consideration there can be no lottery. The skill in guessing (i.c., judging) the weight of a piece of coal is based upon the guesser's ability to gauge the dimensions of the piece, and from his knowledge of the specific gravity of the substance calculate its weight. If this were illegal, we must for many years have been breaking the law by awarding monthly and other prizes to students who most correctly determined by qualitative analysis the composition of mixtures of salts which are supplied to them through the C. & D. "Corner for Students." exhibition of a piece of coal in a window, and awarding prizes

J. H. A. (60/72).—HOUSEHOLD EMBROCATION.—We question if you can beat lin. terebinthinæ, B.P., as a safe liniment for general purposes. We quote the following from the new edition of "Pharmaceutical Formulas":

Ova				iii.
Ol. terebinthinæ				3xv.
Acidi acetici	•••	•••		žxv.
Spirit	•••	•••		žiij.
Camphoræ	•••	•••		ξj.
Ol. eucalypti Tr. capsici	•••	•••		31j.
	•••	•••	•••	žj.
C A				

A nice stimulating clear liniment is:

Mentholis				5ij.
Lin. eamphoræ eo		•••		žij.
Lin. saponis	•••	•••	•••	3viij
M. S. A.				

This may be coloured with a few grains of dragon's-blood.

C. R. (60/55).—CHEAP SACHET-POWDER:

```
Pulv. iridis rhizom.
    Moschi
                                      gr. j.
Triturate together for half an hour, then add-
   Ol. lavandulæ ... ...
                                 ... 5j.
... zviij.
    Furfuræ
                ...
                      ...
                             ...
Mix well.
```

You may replace the lavender with any other essential oil or synthetic perfume, and so secure variety. See also the new edition of "Pharmaceutical Formulas" for many hints on this subject.

Hypo~(60/96).—We cannot say what the ointment contains, but you seem to be correct so far as the ol. rusci is concerned.

Hives (60/3).—Teething-powders.—The following is a satisfactory powder-mixture:

```
Hydrargyri subchloridi ...
Phenacetini ...
Phenacetini ... ... 5iss.
Pulv. sacchari albi ... ... 5vss.
```

Mix well by sifting. Put up into 6-grain powders. Directions: For children of ten months and upwards a whole powder, five to ten months half a powder, two to five months a quarter of a powder. To be given at bedtime before the last

A. E. (60/70).—The only advice we can give you is to persevere with internal remedies.

W. M. W. (61/70).—Cod-liver-oil emulsion:

Pulv. acaciæ					Zviij.
Ol. morrhuæ					3xxx.
Aquæ					3xxxiii.
A 1					
Sodii hypoph	1-	:4:.	•••		₹vii.
Sodii nypopi	ospn	IUS	•••		ξss.
Calcii hypopl	nospr	utis	•••	• • •	₹ss.
Ol. essential					mxLV.
Elixir. saccha	rini				a s

This formula of yours is not bad. Mix the powdered gum with the cod-liver oil in a large mortar; transfer to your

mixing-machine and add the flavouring, then add a mixture of the lime-water and 13 oz. of distilled water. Agitate until thoroughly emulsified. Dissolve the hypophosphites in 20 oz. of water, with this mix the elixir, and add the mixture gradually to the contents of the emulsifying-machine, keep-ing it going all the time. Lime-water is a useful addition to cod-liver-oil emulsions; it neutralises the trace of free acids invariably present and helps the emulsification.

Horn (61/36).—The only means we know of for seftening horn temporarily, without destroying it, is the use of steam or boiling water.

Rats (51/6).—See the formula on p. 451. A fraction of a grain of free phosphorus is sufficient to kill a rat, it being one of the most violent poisons.

W. E. R. (61/45).—Two per cent. of glycerin in the glove-cleaners prevents them drying without interfering with their detergent properties. Perhaps you can send us a specimen of the hair-wash tablet.

W. E. M. (61/71).—Easton's Syrup U.S.P.—The quantity of strychnine in a fluid drachm of the elixir (C. & D., September 2, p. 424) should be one-sixty-fourth of a grain. There is also a syrup made by mixing 250 c.c. of glycerite with syrup to 1,000 c.c. The formula of the glycerite is as follows:

```
Soluble ferrie phosphate 80 grams
Quinine ... ... 104 grams
Strychnine ... ... 0.8 gram
Phesphoric acid (85 per
                ... ... 200 c.c.
... ... 500 c.e.
... ... 1000 c.c.
   cent.)
Glycerin
 Water to
```

Dissolve the phosphate in 200 c.c. of water by heating to a temperature not exceeding 700 C., add the acid, then the quinine and strychnine, and water to 500 c.c. Stir until dissolved, add the glycerin, and filter if necessary.

A. J. P. (61/53).—It is not possible to completely take away the odour of paraffin oil. It can be reduced by washing with 5-per-cent, solution of potassium bichromate and sulphuric acid, afterwards with water. Perfume must do the rest, if it is a hair-application you are aiming at.

F. R. (61/34).—WATER OF PLANTING.—We do not know what this ingredient of an eye-lotion can be. Perhaps some reader

may be able to give a hint.

J. W. B. (61/67).—Bromfton Hosfital Cough-lozenges.—The following is the formula given in "Pharmaceutical Formulas" which is the one generally followed:

```
Extract of liquorice
                           ...
                                   ... gr. iij.
    Oil of anise ...
                    ...
                             ...
                                   ... mss.
    Lozenge-basis
                                   ... gr. xv.
                             ...
For one lozenge.
```

M. M. (48/65).—LINEN-GLESSER.—The sample which you send is approximately as follows:

Curd soap 8 parts Stearin ... Powdered talc. 1 part 11 parts

We presume that these ingredients are intimately mixed in the powdered state and made into blocks by compression.

Transparent (62/5).—CRYSTOLEUM MEDIUM.—Your sample of Transparent (02/0).—CRISTOLEM MEDICA.—I our sample of liquid to make albumenised paper transparent prior to painting for crystoleum work differs from what is commonly used (Canada balsam 1 and oil of turpentine 2). Yours is a mixture of elemi varnish 1 part and castor oil 3 parts. The elemi varnish is a solution of 1 part of the resin in 2 to 3 parts of rectified spirit.

Coming Events.

Notices for insertion under this heading should be received by the Editor on Wednesday of each week.

Tuesday, September 19.

Bradford and District Chemists' Association, Darley Street, at 9 p.m. Annual meeting, at which the report and balance-sheet will be submitted and officers elected.

Royal Photographic Society of Great Britain. Opening of the fiftieth annual exhibition at the New Gallery,

Thursday, September 21.

Chemists' and Druggists' Society of Ireland, 11 Waring Street, Belfast, at 8 p.m. Opening of the new rooms.

Pharmaceutical Society of Great Britain. Local meeting at the Lion Hotel, Cambridge, at twelve o'clock. Lunch at 1.30 p.m. Public meeting at Guildhall afterwards, where tea will be provided by the Mayor. Colleges may be afterwards visited. All who desire to attend luncheon should communicate with the Hon. Secretary, Mr. B. Sidney Campkin, Mill Road, Cambridge, by Tuesday, September 19.

Trade Report.

NOTICE TO BUYERS .- The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C., September 14.

THERE have been few alterations in drugs and chemicals this week, but the tone of the general market continues steady, although trading in many quarters is not so brisk it was last week. The chief alteration in fine chemicals is a reduction in cocaine owing to fresh competition. Quinine could not be more lifeless speculatively. Quicksilver remains easy. Bismuth salts continue in steady demand. Citric and tartaric acids and cream of tartar are all steady, but by no means active. In drugs, areca are higher, and West Indian tamarinds, which are scarce, are also held at advanced prices. The wet weather in Belgium has affected the crop of chamomiles, and prices are dearer. Ergot, on the other hand, is cheaper. Menthol is also easier but fluctuating. Lycopodium, linseed oil, and nitrate of soda are lower. Antimony is firm, and in essential oils the chief movement has been a much improved demand for American peppermint oil at advancing prices. The following table shows the principal alterations of the week, inclusive of those recorded at the drug-auctions:

Higher	Firmer	Easier	Lower
Areca Benzoin (Sum.) Coca-leaves Ipecacuanha Oil, pepper- mint (H.G.H. and tin oil) Rosin Tamarinds	Aloes, Cape Chamomiles Lead-com- pounds Senna (Tiny.) Shellac	Ergot Gamboge Honey Menthol Soda, nitrate Wax, bees'	Aloes, Curação (fine) Cocaine Linseed oil Lycopodium Oil, geranium (African)

Cablegrams.

Hamburg, September 14:-Refined camphor is firm.

Japan wax is quiet and ipecacuanha is scarce.

SMYRNA, September 14:—The sales of opium for the week ended Wednesday amount to 180 cases at the equivalent of from 7s. 10d. to 8s. 8d. per lb. Rich grades are firmly held, and common are easy.

New York, September 14:—The drug-market is active. Opium has advanced to \$3.30 per lb. for druggists' in single cases. Bromide of potassium is higher at 17c. per lb., a rise Peppermint oil in tins is also advancing, and \$2.50 is to-day's quotation Menthol is higher at \$2.40, and Rio ipecacuanha is strong at \$1.70 per lb. Ergot is firmer at 45c, per lb. Cascara sagrada is quiet at 6c, per lb.

Heavy Chemicals.

Business in the heavy-chemical market continues to be on the whole good, both for home and export, and prices all round are on the firm side. A good average has been done up to date on next year's account, and inquiries are on the

ALKALI PRODUCE.—Quotations all round ru'e steady, and bleaching-powder is particularly firm with brisk demand. Recent advanced figures still rule, and higher rates are not improbable. Caustic soda and ammonia alkali are also very

steady.

Sulphate of Ammonia.—The late firm tone continues, and the tendency is towards further advance. Present nominal figures: Beckton 12l. 12s. 6d.. Beckton terms 12l. 10s., London 12l. 8s. 9d. to 12l. 10s., Leith 12l. 10s. to 12l. 12s. 6d., and Hull 12l. 7s. 6d. to 12l. 8s. 9d.

Green Coppersument and the average demand shows no fluctuation. Best Lancashire makes 37s. 6d. to 40s. per ton, f.o.b. Liverpool, and Welsh 11s. to 12s. per ton, free on rails in bulk.

BICHROMATES OF POTASH AND SODA are in fair demand at recent rates. Bichromate of potash, English and Scotch deliveries, 3d. per lb., less 2½ per cent. Glasgow, and for export 2¾d. per lb. net, f.o.b. Glasgow. Bichromate of soda, English and Scotch deliveries, 2¼d. per lb., less 2½ per cent. Glasgow, and export 2d. per lb. net, f.o.b. Glasgow.

Lead Compounds are moving better and prices are higher. White acctate of lead 24l. 10s. per ton, brown acctate 18l. per ton, nitrate 25l. per ton, all less 2½ per cent. Glasgow.

Zinc Salts are very firm at somewhat advanced rates, and tendency is towards further improvement. Zinc sulphate crystals 6l. 10s. to 6l. 12s. 6d. per ton; zine chloride solution 100° Tw. 6l. 10s. to 6l. 15s. per ton.

Magnesium Salts are moving fairly well, and are otherwise

Magnesium Salts are moving fairly well, and are otherwise without change. Sulphate (Epsoms) 57s. 6d. to 62s. 6d. per ton, chloride 65s. to 67s. 6d. per ton, and carbonate 37s. 6d. to 40s. per cwt.

Liverpool Drug-market.

Liverpool, September 13.

Arsenic.—Owing to scarcity the price has advanced to 16l. per ton, net.

GUM ARABIC.—There have been further sales at advanced prices.

ACID, TARTARIC.—Foreign is offered at 103d. per lb., e.i.f., less 5 per cent.

CASTOR-SEED.—Ten tons Brazilian have been sold at 10s. 6d.

per cwt.

TURPENTINE.—Firm at 47s. per cwt.

Senega has advanced to 2s. 9d. per lb., c.i.f., for Western Minnesota.

Aniseed.—Russian is firmly held at 22s. 6d. per cwt. It is

difficult to get offers of the new crop.

CASTOR OIL.—Good seconds Calcutta is firmly held at from Castor Oil.—Good seconds Calcutta is firmly held at from $5\frac{1}{16}d$. to $3\frac{3}{8}d$. per lb., and for shipment $3\frac{1}{4}d$. is still wanted. In spite of further arrivals of first-pressure French the quotation remains steady at $2\frac{7}{8}d$. per lb., and for shipment 24l. 10s. per ton, f.o.b., is quoted.

GINGER.—The market has been entirely cleared of new and old crop African.

FENNEL-SEED.—Large sales of Turkish have been made at 15s. 6d. per cwt., ex quay. Indian is firmly held on the spot at from 15s. to 16s.

CHAMOMILES.—Finest new flowers are quoted at 70s. per

CHAMOMILES.—Finest new flowers are quoted at 70s. per cwt., f.o.b. The quality is not equal to previous years.

BEESWAX.—A sale of 17 blocks Sierra Leone has been mado

at 6l. 17s. 6d. per cwt., in store.

German Drug-market.

Hamburg, September 12.

Business in general is quiet, and our drug-market does not show much life at present.

CAMPHOR (REFINED) is firmer; the factorics ask 630m. per 100 kilos., while second-hands want 625m. per 100 kilos.

CANTHARIDES are steady at 9½m. per kilo.

CASCARA SAGRADA is lifeless at 63m. per 100 kilos.

CUMIN-SEED is firm; Malta of new crop is quoted 60m. to 64m. per 100 kilos. CITRIC ACID is firm at 255m. per 100 kilos.

CARNAUBA WAX is dull and tending lower for grey at 240m. per 100 kilos. and yellow at 410m.

ERGOT is quiet, and easier at 385m. to 380m. per 100 kilos. Fenugreek-seed.—Indian has been sold at 16½m. per 100 kilos.

IPECACUANHA is very scarce, with a fair demand; 16m. to 17m. per kilo. is asked.

GOLDEN SEAL.—Canadian is lower at 12m. per kilo.
JAPANESE WAX is steady on the spot at 116m. per 100 kilos.
Lycopodium has been tending lower; spot is quoted 510m.

and forward 475m. per 100 kilos.

MENTHOL is quiet at from 18m. to 17½m. per kilo.
QUICKSILVER is cheaper at 150m. per bottle.
SENEGA is inactive at from 600m. to 590m. per 100 kilos.
SEREMACETI is firm at 260m. per 100 kilos.

WORMSEED is dearer at 135m. per 100 kilos.
OILS (FIXED).—Castor is quieter at 48m. per 100 kilos. for first-pressing, in barrels. Cod-liver is unchanged at 90m. to 92m. per barrel. Chinese wood is firm at 60m. per 100 kilos.

Oils (Essential).—Peppermint is unchanged at 10m. per kilo, for Japanese and 13½m. per lb. for HGH. Star aniseed is $10\frac{3}{4}$ m. to 11m. per kilo.

ACETANILIDE is firm at from $9\frac{1}{2}d$. to 10d. per lb., according to quantity.

Alcohol.—The "Kolnische Zeitung" of September 7 reports that the Berlin Spirit Centrale have reduced the price of pure alcohol for export by 10 marks per hectolitre (say 3d. per pf. gal.). This step has been taken, it is stated, to stimulate the export trade, as a considerable production of

spirit is anticipated from the large potato-crop. The export price has hitherto been maintained on the same level as that prevailing for the home market.

Antimony remains firm at 401, per ton for Japanese crude

and 60%, for English regulus.

Areca.—The small stocks on the spot have enabled holders to obtain 20s. per cwt. this week.

Arrowroot.—Steady. At auction 286 barrels were offered, the bulk of which sold at from $1\frac{5}{8}d$. to $1\frac{7}{8}d$. per lb. for middling to good manufacturing St. Vincent.

Arsenic.—A further advance has taken place in several quarters, 15s. per cwt. being quoted in casks and 16s. in kegs, for best white powder. The article is momentarily kegs, for best white powder. scarce on the spot.

Asafetida.—For the drug-sale on September 28 there are already advertised 299 cases, of which 202, which have just arrived per Kaffir, are offered "without reserve."

BISMUTH.—There is a steady demand for the salts at full prices; carbonate is quoted 9s. 6d. to 9s. 9d., and subnitrate at from 8s. 10d. to 9s. 1d. per lb., according to quantity.

CAMPHOR.—Japanese refined tablets continue firm, sales having been made at from 2s. 8d. to 2s. 9d. per lb. on the spot. English refiners quote 2s. 10d. for bells. In auction 3 cases of Japanese refined in 1-oz. tablets were offered and sold at 2s. 8d. per lb. net.

Cantharides.—New Russian are firm at 4s. 4d. per lb., c.i.f.

Cascara Sagrada has been in fair demand this week, with spot sales at from $29s.\ 6d.$ to 30s. per cwt. 27s., c.i.f., is quoted for shipment.

CHAMOMILES.—The firmer tendency noted last week has crystallised into an advance of fully 2s. 6d. per cwt., owing to the Belgian crop having suffered from continuous wet weather. The consequence is that the flowers are more or less stained. Importers quote from 65s. to 75s. per cwt., according to quality.

CINCHONA.—The stock in first hands at Amsterdam on September 7 consisted of 4,805 packages of Government bark and 23,906 packages of private bark, or a total of 28,711 packages. These figures include the first-hand parcels to be offered at the auction on September 28. In the drug-auction 16 serons of musty Huanuco bark sold at $6\frac{1}{2}d$. to $7\frac{1}{2}d$., and rather broken Loxa at $8\frac{3}{4}d$. per lb. 112 bales of flat Calisaya 4 sold at $10\frac{1}{2}d$; an offer of $9\frac{1}{2}d$. was refused. Of a further 52 bales of this description 20 sold at $9\frac{1}{2}d$. for dull. Flat Cartagena was bought in at 4d. per lb.

COCAINE.—The makers have reduced their prices by 1s. 1d. per oz., and now quote 13s. 3d. per oz. for B.P. hydrochloride, 13s. for at least 70 oz., and 12s. 8d., for at least 175 oz. Pure cocaine is now quoted at from 14s. 7d. to 15s. 3d. per oz., according to quantity. The previous alteration in the price of cocaine was in the middle of December last, when the makers advanced the price by 1s. 1d. The present alteration is attributed to the advent of a new maker offering at below the convention rates.

Ergot.—Although the market situation has undergone no material alteration, the fact that a few parcels have come forward has brought out cheaper offers of Russian, 1s. $8\frac{1}{2}d$. per lb., c.i.f., being quoted.

LYCOPODIUM is lower, double-sifted Russian offering at

2s. 2d. per lb., c.i.f.

MENTHOL is flat and 3d. to 6d. lower, with sales at 7s. 6d. spot for Kobayashi, but to-day sellers ask 7s. 9d. For December-January shipment a sale of 20 cases has been made at 8s., c.i.f. A case of Kobayashi crystals was offered at auction, without reserve, and sold at 7s. 5d. per lb., the wrappers on tins being sea-stained.
Oil, Caston.—Steady but quiet. Hull make for prompt or

to December delivery is quoted 241. 2s. 6d. per ton for firsts, and 22l. 2s. 6d. for seconds; November April 24l. 7s. 6d. per ton for firsts, and 22l. 7s. 6d. for seconds, delivered free,

ex wharf London.

OIL, COD-LIVER, is unaltered, holders quoting 100s. per barrel and upwards for finest non-freezing Lofoten oil. In the drug-auction 5 barrels of new Norwegian non-freezing oil were limited at 100s. per barrel. Our Bergen correspondent, writing on September 11, states that the oil-market is still unaltered but rather firm at 95s. per barrel, f.o.b.

Bergen, for finest non-congealing cod-liver oil. Although the transactions are limited, holders nevertheless appear firm and of opinion that still higher prices later on cannot be avoided. The exports from Bergen up to date amount to 8,470 barrels, against 5,030 barrels at the corresponding date of last year.

OIL, GERANIUM.—Bourbon is quoted at from 9s. 9d. to 10s. per lb., according to quantity, and African is lower at

13s. per lb.

OIL, LAVENDER.—The following prices are now quoted for French of the new crop: Mont Blanc, 10s.; from picked flowers, 9s.; "extra," 7s. 9d.; and super, 6s. per lb. Pure Spike is quoted 5s. per lb., with other qualities at proportionately lower prices.

Oil, Lemon.—Reports from Sicily indicate that the lemoncrop has been damaged by hot weather. It is therefore expected that the new crop will be a short one. It is also said that the Fruit Proprietors' Association intend to keep up the prices, as they are doing with citrate of lime.

OIL, PEPPERMINT.—Dearer. A good quantity of American H.G.H. and tin oil has been sold this week, especially for forward delivery. For the former, up to 13s. 6d., spot, has been paid, an advance of quite 1s. per lb. Pure Wayne County for forward delivery has sold in quantity at 10s. per lb., c.i.f., and on the spot 11s. 6d. to 12s. is quoted. Cables from New York report a stronger market.

OILS, FIXED.—Linsted oil has declined 9d. per cwt. on the week to 16s. $1\frac{1}{2}d$. in pipes on the spot, and 16s. 3d. in barrels. Both Cochin and Ceylon Coconut are unaltered at 34s. and 28s. 6d. per cwt. respectively. Refined Cottonseed is a little easier at from 16s. 6d. to 18s. 6d., and crude is 6d. lower at 15s. Lagos Palm oil and Petroleum are unaltered. Turpentine closes at 46s. 6d. on the spot, being 3d. dearer than last

Opium.—Sales in London continue of quite a retail character, good Smyrna druggists' offering at 9s. per lb. Persian continues extremely scarce, there having been no arrivals; for good paste (10 per cent.) 28s. is asked, and a

lower grade at from 25s, to 27s. per lb.

SMYRNA, September 2.—The transactions during the week amount to 25 cases, comprising four cases old choice Karahissar at the equivalent of 9s. 1d., eleven cases old Karahissar nissar at the equivalent of 98, 1a., eleven cases old Karanissar t.q. at 8s. 11d., three cases new current Adette at 8s. 2d., and seven cases new Karahissar t.q. at 8s. 7d. per lb., c.i.f. The market closes unaltered with buyers, and the arrivals in Smyrna amount to 866 cases, against 3,103 cases at the same time last year. The prices have been unchanged throughout the month, in spite of the fact that the sales during August amounted to 627 cases.

QUICKSILVER remains in an easy condition, importers quoting 7l. 2s. 6d., and second-hands 6d. to 1s. less, according to holder. The present price is the lowest now recorded for almost seven years. The imports for the eight months of this year amount to 33,688 bottles, against 32,197 bottles; and the exports to 14,417 bottles, against 14,793 bottles for the corresponding period of 1904.

QUININE.—Extreme depression prevails in this article, no business whatever being reported in the speculative market this week; 9d. per oz. is the nearest value of good German brands of sulphate.

Rosin is 3d. per cwt. dearer, at 9s. 3d. for common strained, ex wharf.

Salttetre.—British refined in kegs is quoted 25s., and arrels 24s. German in barrels is 22s. $4\frac{1}{2}d$. and kegs barrels 24s. 22s. 9d. per cwt.

Shellac is firmer with a steady trade on the spot, fair to superior TN orange selling at from 140s. to 145s. per cwt. Fair sales of blocky GAL Garnet have been made at 146s. to 147s. 6d. Futures are firm to dearer, but extremely quiet, the small sales including November delivery at 181s. to 183s., and September 178s. to 178s. 6d.

Sona Nitrate.—Both ordinary and refined are 3d. per

cwt. easier at 10s. $7\frac{1}{2}d$. and 11s. per cwt. respectively. SPICES.—At auction Jamaica Ginger was quiet, dull to fair washed selling at from 42s. to 45s., good common 39s. to 40s., and ordinary small 36s. 6d. Cochin was bought in at 20s. for washed rough and 20s. for cuttings. Pepper sold at $6\frac{1}{8}d$. for good heavy Gapis, and $4\frac{5}{8}d$. for light; fair Singapore is quoted privately at $5\frac{31}{12}d$. At auction fine White Singapore was bought in at $11\frac{1}{2}d$. and superior at 1s. 1d. Fair Singapore is offered privately at 8½d. and Penang at 8d. Pimento sold at unchanged prices, including fair small at 2½d. Chillies were steady, 20 bags of East Coast African selling at 33s. 6d. for good bright red. Nutmegs were quiet but steady. Mace sold at from 1s. 5d. to 1s. 7d. for good pale, 1s. 3d. to 1s. 4d. for fair, 1s. 1d. to 1s. 2d. for ordinary, and 10½d. to 1s. for pickings. Twelve bales of fair, rather dark Zanzibar Clores sold at 5½d., which is the price asked privately. Practically no business has been done for delivery, closing sellers October-December at 5½d.

TAMARINDS.—Much higher prices are now asked for West Indian. Barbados are quoted 18s., Antigua at 16s., and

common dark at 13s. per cwt., duty paid.

Vanilla.—The exports from Réunion during 1904 amounted to 94 tons, against 49 tons in 1903 and 50 tons in 1902.

Vanillin.—Sales of pure in quantity have been made from second-hands at 1s. per oz. net.

London Drug Auctions.

The demand at to-day's auctions was rather slow considering that new goods only were offered. Cardamoms and sonna were the features of the sale, and values of the latter tended dearer, competition being keen. Curaçao aloes was neglected, fine selling at easier rates, but for Cape aloes, which was in reduced supply, improved rates were paid. Buchu was firm, and Sumatra benzoin was extremely scarce. Calumba is steady, and for Ceylon coca-leaves a substantial advance was paid. Fine dragon's-blood was firmly held, and for euphorbium, which is now being imported in increased quantities, there was no demand. Gamboge dropped a trifle. Slightly easier rates were also paid for Jamaica honey. Rio ipecacuanha advanced 2d. per lb. on the rates paid privately. Myrrh still keeps very dear. For olibanum a fair demand was experienced. Eucalyptus oil has been selling well, but prices are unaltered. Rhubarb has been arriving more freely, but prices as yet show no decline. Grey Jamaica sarsaparilla is very scarce. For beeswax generally the situation is easier all round. The following table shows the amount of gods offered and sold:

the amount of gods offered and	a soru ;					
Offered Sold	Offered Sold					
Albumen, egg 3 0	Oil—					
Aloes—	cinnamon 18 *1					
Cape 12 12	-1					
Curaçao 45 5						
Antimony (Jap.) 15 0						
Balsam—	eucalyptus 55 *. 0					
Canada 2 0	lemon 3 0					
Benzoin—	lemongrass 4 0					
	lime 2 2					
	orange 3 0					
Sumatra 14 14	Olibanum 114 74					
Buchu 7 5	Onion seed 9 0					
Cactus flowers 2 0	Orange-peel 3 0					
Calumba 72 72	Orris 60 30					
Camphor (refined) 3 3	Patchouli 27 0					
Cannabis indica 3 0	Puree 1 0					
Cantharides 4 0	Quillaia 76 0					
Cardamoms 401 273	Quince-seed 3 0					
Cinchona 255 20	Rhubarb 105 11					
Coca-leaves—	Sarsaparilla—					
Ceylon 47 40	Native Jam 5 3					
Cuttle-bone 6 0	Scablac 18 0					
Dragon's-blood 21 0	Senna (Tinne-					
Euphorbium 66 0	velly)13521352					
Gamboge 21 21	Conomo F 0					
Gentian (pdr.) 5 0						
Gum arabic 5 0	Squill 29 10					
Honey—						
Jamaica 86 85	Sticklac					
Honolulu 22 0						
Ipecacuanha—						
	Turmeric 228 39					
	Wax (bees')—					
Minas 1 0	Ecuador 2 0					
Rio (Matto Grosso) 19 13	East Indian 35 0					
Kola 36 32	Jamaica 22 7					
Liquorice root 11 0	Madagascar 11 0					
Manna 5 0	Mombasa 65 0					
Menthol 1 1	Mozambique 12 0					
Musk (pod) 4 0	Zanzibar 317 0					
,, (grain) 3 3	Japanese 10 0					
Myrrh 18 1	Zedoary root 231 0					
* Sold p						

ALBUMEN.—Three cases of egg were limited at 1s. 11d., and a bid of 1s. 10d. for the parcel is to be submitted.

Aloes.—Cape was in small supply to-day, only 12 cases being offered, and selling at about 1s. to 1s. 6d. advance. Good bright hard firsts sold at 25s., and seconds at 24s. to 24s. 6d. per cwt. Good livery Curação was cheaper. 5 boxes selling at 39s., no reasonable bids being made for other qualities.

Balsam Canada, in cases, was held at 2s. per lb. for fair.

Benzoin was in extremely small supply, only 14 cases of Sumatra being offered, which sold at from 6l, to 6l, 10s, 6d, per cwt. for barely fair seconds being 10s, dearer. Four cases of Palembang thirds sold at 40s, per cwt.

BUCHU.—Firm. Good quality remains scarce. In auction only 7 bales were offered, consisting of fair greenish

round, of which 5 sold at 6d. per lb.

Calumba.—A parcel of 72 bags sold at 21s. for fair darkish natural sorts,

Cardamons were in fair demand at practically unaltered rates, but occasionally where any alteration was made in the medium qualities, prices favoured buyers. Fine, however, were dearer. The following rates were paid: Ceylon Mysore—Good extra bold pale, 2s. 11d.; bold pale, 2s.; medium and bold pale long, partly open, 1s. 8d.; bold pale round, 1s. 6d.; good pale long, 1s. 3d. to 1s. 4d.; good medium pale, shelly, 1s. to 1s. 2d; medium pale, 10½d. to 11d.; small and medium brown, 10d.; brown and splits and pickings, 8d. to 8½d.; ordinary to good dark seed, 9d. to 1½d. Tellicherry—Small pale, 8d. to 9½d.; small and medium pale, 11½d.; good medium pale, 1s. 2d. per lb.

Coca-leaves.—Ceylon were from 2d. to 3d. per lb. dearer, but the quality was exceptionally fine, from 1s. 4d. to 1s. 5d. being paid. Fair to good greenish sold at from 1s. to 1s. 3d., and country damaged at from 9d. to 11d.

per lb.

Dragon's-blood.—Fine bright re-boiled lump was limited at 9l. per cwt. A bid of 10s, less was refused. For good re-boiled 8l. 10s, was wanted.

EUPHORBIUM.—This article is being imported from Morocco in increasing quantities, as five separate parcels, aggregating 66 packages, were offered to-day. We understand that the chief demand for this resinous juice now comes from paint-manufacturers, who use it as an ingredient in anti-corrosive paints for ships' bottoms. No doubt the irritant insoluble qualities of the gum proves an obstacle to the adhesion of barnacles. There was no demand in auction. 25s. per cwt. will buy fair Morccco.

Gamboge.—Easier. A pile of 21 cases fair blocky damp Siam pipe sold cheaply at 14l. 2s. 6d. per cwt., and a case of good Saigon pickings realised 6l. 17s. 6d. per cwt.

Gentian.—Five barrels of powdered, guaranteed free from foreign matter and ground by Stafford Allen & Sons, were limited at 30s. per cwt.

HONEY.—Easier. Good pale bright amber Jamaica liquid in tierces sold at 19s. 6d. to 20s., rather darker ditto at 17s. 6d. to 18s. 6d., and ordinary dark at 16s. 6d.; common brown setting sold at 13s. 6d. per cwt. For 20 cases of common dark brown Honolulu liquid a bid of 13s. 6d. was refused, 16s. being wanted. Twenty-two cases of good palish bright amber liquid Jamaica sold at from 21s. to 22s., and darkish at 20s. 6d.

IPECACUANHA.—Before commencing the sale of the 31 bales of East Indian root the broker made a public statement in reference to the remarks which we made in our issue of September 9 (p. 443), wherein we stated that "the importer of 30 odd bales of East Indian root has placed an auction limit of 8s. on his parcel." Mr. Hendry said: "I need hardly say that it is not my intention to hold out for 8s. I would be glad if the gentleman who made that statement would take the present opportunity to own up to it. I am told that it was current in the 'Lane,' and I would be glad to receive an open acknowledgment now." No response, however, was made to this appeal and Mr. Hendry proceeded with his sale, disposing of 17 bales out of the 31 offered at 7s. 1d. per lb., for good native picked and well-annulated root of uniform quality. Of Rio, 17 bales were offered, of which 13 sold at from 7s. to 7s. 2d. per lb., according to quality. showing an advance of 2d. on the private rates. Previous to the auction, sales of probably half-adozen bales were made from first-hands at 6s. 11d. per lb.

for fair Rio, and we understand that since the auction further sales of East Indian have been made.

Kola.—Twenty-five barrels of West Indian sold at 4d. per lb. for dark whole and halves, and 7 cases of fair dark Ceylon halves sold at 4d. per lb. At the spice-auctions 25 baskets of green were bought in at 3d. per lb.

Manna.—Five cases of small damp broken sorts, 1904 crop, were offered and bought in at 2s. per lb., no bids being made.

Musk.—Four tins of medium to bold brown damp oldfashioned Tonquin pod were offered, but no bids were elicited; 45s. per oz. is about the value. Three bottles of grain musk sold at from 2s. 6d. to 3s. per oz.

Myrrh.—A case of dark and blocky sorts from Bombay sold without reserve at 85s. per cwt. A bid of 90s. was refused for 17 bags of partly blocky and dark Aden sorts.

OIL, CINNAMON.—Genuine Ceylon bark oil had been partly sold at 1s. 4d.; another parcel was held at 10d., and for leafoil 2d. per oz. was wanted.

OIL, EUCALYPTUS.—The demand has considerably improved of late and stocks have been reduced. In auction 20 cases offered had been sold privately, and for 35 other cases, containing 67 to 68 per cent. eucalyptol, 1s. 1d. was wanted, and for 72 per cent. 1s. $1\frac{1}{2}d$. was the price.

OIL, LIME.—Two cases West Indian distilled realised 1s. 8d. per lb.

OIL OF LEMONGRASS.—Winter's brand was bought in at 9d. per oz.

OLIBANUM.—For 15 cases of fair pickings 18s. was paid without reserve, and for slightly blocky 17s. was paid, also without reserve; 54 cases drop had been sold privately.

ORRIS.—Thirty bags of fair lean Verona sold without reserve at 13s. per cwt.

Rhubarb is arriving more freely, the offerings to-day including several parcels of new-crop Canton. Four cases of Canton pickings, part spongy, with three-quarters fair pinky fracture, sold at 1s. to 1s. 1d. For further lots from another catalogue a bid of 1s. 1d. is to be submitted. Two cases of bold flat Canton, with three-quarters fair palish pinky fracture, were sold at 1s. 3d. Medium and bold round horny High-dried, with fair coat and three-quarters pinky fracture, was bought in at 1s., and for ditto, with half pinky and half dark fracture, $9\frac{1}{2}d$. was wanted. Four cases of small round horny High-dried realised $8\frac{1}{2}d$., and for a case of good bold flat orange-coated Shensi, with three-quarters fine pinky break, 2s. 5d. was paid without reserve in order to close up an account sale.

SARSAPARILLA.—The offerings to-day consisted of 5 bales of native Jamaica only, of which one sold at 8d. for middling reddish and yellow and $6\frac{1}{2}d$. to 7d. for sea-damaged yellow. Privately Mexican is quoted $5\frac{3}{4}d$. per lb., c.i.f.

Senega.—Fair palish of new crop was held at 2s. 9d. per lb. net, no allowances.

Senna.—The quality of the Tinnevelly leaf offered to-day showed a slight improvement, there being rather more of the bolder greenish leaf, most of which was specky, how-The demand was good all round, and although prices opened about the same as those of the last auction, the second catalogue of 670 bales went at distinctly firmer rates. second catalogue of 00 bales went at distinctly infiner rates. The following rates were paid: Bold greenish leaf, but partly specky, 3d. to 4d.; medium greenish, 2d. to $2\frac{3}{4}d$.; small green, $1\frac{3}{4}d$. to 2d.; small specky, $1\frac{1}{4}d$. to $1\frac{1}{2}d$.; ordinary small specky yellowish, $\frac{3}{4}d$. to 1d. Pods, $\frac{3}{4}d$. to $1\frac{1}{4}d$. per lb. The exports of senna from Hodeida during 1904 amounted to 828 bales, against 419 bales in 1903; 717 bales in 1901.

SQUILL.—Ten bags of ordinary brown and dark sold without reserve at $\hat{1}_2^1d$, per lb.

TURMERIC.—For slightly wormy Madras finger 15s. 6d. was refused. Wormy and split bulbs sold at from 10s. to

Wax, Bees'.—Easier generally. A string of good bright red Mombasa (of Jamaica character) was held at 7l. per cwt.

Zanzibar was in large supply and neglected, good pale even brown block being bought in at 7l. Jamaica sold at 5s. lower prices, 8l. per cwt. being paid for fair pale to dark, and dark at 7l. 15s. Good was held at 8l. 5s.

WAX, JAPAN, was limited at 59s. for Kitagumi brand.

Cable to Newfoundland.

A submarine cable has just been completed between New-foundland and the Commercial Cable Co.'s cable station at Canso, Nova Scotia, there connecting with the Altantic system of the company. The tariff from Great Britain and Ireland is 1s. per word.

Acacia.

The exports of acacia gum from Egypt from January to July 1905 amounted to 5,173 tons (E121,2691.), against 5,987 tons (E134,1001.) during the corresponding period of 1904. The reduction of 814 tons in the exports this year is attributed to the absence of fresh supplies from the interior. These supplies have been suspended for three months, and are scarcely expected to arrive on a large scale until the new harvest. Prices have therefore advanced considerably, and large parcels are not being sold in Egypt at present, or only at prices which are not yet attainable in European markets. The white and ripe sorts are very scarce and in good demand. The white and ripe sorts are very scarce and in good demand, while the qualities placed on the market are reddish, but are nevertheless held at comparatively high prices.

Eight Months' Foreign Trade.

The Board of Trade returns for August again demonstrate the remarkable vitality of our foreign trade. Imports for the month have advanced by 4,423,000%, or 10.4 per cent., and exports show a further gain of 3,158,000%, or 11.9 per cent. For the first eight months of the current year we have now an advance of 9,376,000% in imports, or 2.6 per cent., and one of 17,785,000% in exports, or 9.1 per cent. The August import figures are the largest shown for any month so far this year; they include 1,714,000% more for food, drink, and tobacco, 1,929,000% more for raw materials, and 815,000% more for manufactured goods, as compared with August of last tobacco, 1,929,000l. more for raw materials, and 815,000l. more for manufactured goods, as compared with August of last year. Included in the latter category is a gain of 80,000l. in chemicals, drugs, dyes, and colours, and for the eight months the increase is now 234,400l., we having imported these goods to the value of 6,498,000l. Exports of chemicals, etc., last month improved by 44,00ll. and they now amount to 9,714,000l. so far this year. In this section we have exported drugs and medicinal preparations this year to the value of 959,000l., of which 29,100l. represents British-made quinine and quinine salts, or 511,162 oz., this latter item comparing with 488,530 oz. exported during the first eight months of 1904. In addition we have exported 2,958l. worth, or 70,580 oz., declared as foreign quinine and quinine salts, or 45,000 oz. less than last year. If any faith can be placed in these figures, the exports of British quinine are finding a much larger outlet abroad than foreign makes. Altogether the exports of chemicals and allied goods this year testify to decidedly increased activity, and there is good reason to believe that with the present cheerful commercial outlook following on the removal of the incubus of war, we shall by the end of the removal of the incubus of war, we shall by the end of the year have established a record year's foreign trade.

Arrivals.

Arrivals.

The following drugs, chemicals, etc., have arrived at the principal ports of the United Kingdom from August 7 to 13, inclusive: Acctone, 59 dms.; acid, acctic, (@ Terneuzen) 184, (@ Fredrikstad) 61; acid, boric (@ Rouen), 210; acid, carbolic, crystals, 33 dms.; acid, citric (@ Marseilles), 10; acid, carbolic, crystals, 35 dms.; acid, citric (@ Marseilles), 10; acid, carbolic, crystals, 35 dms.; acid, citric (@ Marseilles), 10; acid, tartaric (@ Valencia), 51; albumen (@Havre), 12; arrowroot, (@ St. Vincent) 837 bxs., (@ Dominica) 33; arsenic (@ Oporto) 79, (@ Hamburg) 10; asafetida (@ Bombay), 586; bismuth ore (@ Brisbane) 28 bgs.; bleaching powder, (@ Hamburg) 34, (@ Treport) 48, (@ Cologne) 1,245 cs.; bromine (@ Hamburg) 227; Calabar beans (@ W. C. Africa), 18; canary-seed (@ Buenos Ayres), 796; cardamoms (@ Colombo), 35; chloral hydrate, 4 cs.; cinchona, (@ Mollendo) 48, (@ Cartagena) 50; cochineal (@ Las Palmas), 4; coriander (@ Madras), 803; cream of tartar (@ Bordeaux), 64; cumin seed (@ Saffi), 50; euphorbium (@ Saffi), 48; fennel seed (@ Bombay), 251; fenugreck (@ Bombay), 334; galls (@ Persia), 70; glycerin (@ Antwerp), 20 dms.; gum arabic, (@ Bombay) 336 bgs., (@ Alexandria) 401 bgs.; gum, unenumerated, (@ Bushire), 84; gum, tragacanth, (@ Bushire), 183 pkgs.; honey, (@ Sydncy) 100 cs., (@ Chilli) 62; iodine (@ Valparaiso), 158; ipecacuanha (@ Singapore), 30; juniper berries (@ Leghorn), 100; kola (@ Grenada), 5; lime-juice, (@ St. Vincent) 11, (@ Dominica) 426 pkgs.; liquorice juice (@ Bombay), 33 cs.; oil, castor, (@ Calcutta), 300 cs.; oil, cinnamon leaf, (@ Ceylon), 11 chts.; oil, citronella, (@ Ceylon), 65 pkgs.; oil, cod-liver, (@ St. John's, N.F.) 40, (@ Bergen) 30, (@ Christiania) 10, (@ Aalesund) 735; oil, cucalyptus, (@ Melbourne), 170; oil, lemongrass (@ Bombay), 10; oil, lime (@ Dominica), 36 cs.; oil, peppermint, (@ Hamburg) 20 cs., (@ New York) 13; olibanum (@ Bombay), 40 cs.; opium (@ Hamburg), 6 cs.; orris (@ Saffi), 13; quillaia (@ Valparaiso), 294; roots, (@ Barcelona) 24,

Reviews.

Pannell's Reference-book for Home and Office. Containing an English Dictionary, Aids to the Study of English, a Dictionary of General Information, a Medical Dic-tionary, a Guide to Education and the Professions, a Social Guide, The World and the Empire, a Legal Guide, and a Commercial Guide. $9 \text{ in.} \times 6\frac{1}{2} \text{ in.}$ Pp. 984. 6s. 6d. net. London: The Granville Press, Ltd.

This remarkably useful volume is one of the cheapest and ablest productions of the kind which have come under our Its contents are so comprehensive and varied that a mere list of them would fill this page and make interesting enough reading, but we can only treat the book as one submitted to us as representatives of chemists and the drugtrade, and from this point of view we consider the book one which those of our subscribers who are in want of a book of general references can invest in with the assurance of getting something useful from it every hour of the day. Whoever has compiled the book must have spent years at it, and he or they have brought together concise informait, and he or they have brought together concise informa-tion on thousands of subjects. We have tested many items and find them to be remarkably free from error. "Xrayser" complained not long ago about the paucity of information respecting British pharmacy given in the "Encyclopædia Britannica," but he will have little occasion for complaint when he turns up "Pannell's Reference-book," for in the "Guide to Education and the Professions" we find two pages devoted to Chemists, the subject being divided into "Pharmacy" and "Applied Chemistry." This is the best description of the requirements which we have seen in any description of the requirements which we have seen in any non-pharmaceutical publication. The legal information given covers a wide field, 142 pages being devoted to it; and here, again, there is much to admire in the way the writer has epitomised the law with the object of advising laymen on difficulties which frequently arise. The statistical information is the only part of the book which is really ephemeral, because it mostly applies to 1903-4, but there is scarcely a commercial, industrial, or social problem about which one cannot find figures in the chapter. A word of commendation may also be given to the medical dictionary, which has been done with discretion and due recognition of the fact that all that is safe in the treatment of diseases is to temporise until the doctor comes.

The Bodie Book. By Walford Bodie. $7\frac{1}{4}$ in. \times $4\frac{3}{4}$ in. Pp. 195. 2s. 6d. London, 1905: The Caxton Press, Ltd.

In the year 1779 James Graham, M.D., a graduate of the University of Edinburgh, published a book in which the medical and chirurgical practice of his day was "exhibited." A secondary object of the book was to show the ridiculous manner in which the waters of Bath, Aix-la-Chapelle, etc., were used, but primarily the purpose of the book was to tell the world how irresistible in the treatment of disease was the power of "Aerial, Ætherial, Magnetic, Electric, and musical Effluvia and Influencies" in the hands of James Graham, M.D. The author's headquarters were the Temple of Health in the centre of the Royal Terrace, Adelphi, "erected about the beginning of the year 1780," and it was the shrine of the "most powerful Medico-electrial Apparatus." Over the entrance "in a white compartment, with gold letters" were written the words "TEMPLUM ESCULAPIO SACRUM!—a building consecrated or paratus." devoted to the great purposes of preserving and restoring HEALTH." It must have been a wonderful place—gorgeous HEALTH." in its fittings, impressive in its grandeur, and mystical in its electrical and other scientific appurtenances.

"Descending two pairs of stairs, on the first floor above the vaults and warehouses, is a large elaboratory and other conveniences, for the preparation of chemical essences, &c., and simple or galenical medicines."

"On the next story above, are two large, and three lesser rooms, appropriated to my medicinal cabinet; and likewise two other apartments for the accommodation of my apothe-

cary—my chemical operator, and their assistants."
"Entering the room No. I. exactly facing you, stands a handsome pillar in an arched recess, ten feet high, upon which is placed a superb electrical jar of brilliant flint glass, which contains eleven gallons, two-thirds from the bottom, and as white as snow in the inside, and trebly coated with tin foil, &c.—on the outside it is curiously coated with metallic foil of various colours and qualities, in so beautiful and curious a manner as to show the effulgence of the electric fire in discharging. This jar, and its two follows, stand in the great Apollo chamber."

We read further that in room No. II. was "a noble and very powerful electrifying machine," in room No. III. "a curious machine for throwing by the force of electricity, etherial essences, vivifying air, and magnetic effluvium through the whole body." No. IV. was the great Λpollo Λpartment, as to which "words can convey no adequate idea of the astonishment and awful sublimity which scizes the mind of every spectator." And so we go on from magnificence to magnificence in language which eighteenth-century writers were spectator." adepts in, until we reach, on page 217, an appendix contain-

"A Short Description of the Composition, Preparation and Properties of the Three Great Medicines, which for the universal Benefit of Mankind, as well as for my own Honour and Emolument, are now sold in almost every City and great Town in the World;—being perhaps the first advertised Medicines that Sovereign Princes, and crowned Heads! were over advised or permitted to take."

Pity 'tis that the reviewer is not permitted space (twentyfive pages in the book) to quote the formulæ of these three great medicines, with all the mystical and occult ceremony that accompanied their compounding, but the names may at least be rescued from eighteenth-century oblivion and placed in the security of the twentieth. They are:

I. ELECTRICAL ÆTHER! Or, AN AGGREGATE COM-POUND OF THE MOST ACTIVE FACULTIES OF THE MATERIAL SOUL OF THE UNIVERSE.
II. NERVOUS ÆTHERIAL BALSAM! Or, The re-

storative Ætherial Oil, for decayed and worn-out Constitu-

tions.
III. THE IMPERIAL PILLS! Or, THE UNIVERSAL PURIFIERS OF THE BLOOD AND JUICES!

Dr. Graham was a wonderful man. His book contains testimony to that effect from grateful patients, who included her Grace the Duchess of Devonshire, the Right Honourable Lord and Lady Spencer, Lady Clermont, his Serene Highness Frederic Prince of Hesse-Cassell, the Duke de Coigney, the Marquis of Serent, and many other noble personages. There are some little bits of real history in it too—e.g., "Mr. Jones's very excellent tincture of the bark" is mentioned, and a footnote states:

"Mr. Jones, who is a chymist and druggist in Russel Street, Covent Garden, is a man of fortune and character, and particularly attentive in having the best and most genuine medicines that can be procured."

Mr. William Warren now carries on the pharmacy (Hooper & Co.'s) in which Mr. Jones made his fortune. (chiefly local) sang in the praise of Dr. James Graham, and regular practitioners reviled his name, but all and sundry were admitted into the Temple of Apollo by ticket, price half-a-crown, and the doctor's charges were a guinea the first consultation and half a guinea the second; but from those whom he attended at their own houses two guineas each visit was expected. We cannot discover from his book what the three great medicines were sold at. These particulars of a forgotten practitioner are recalled to us while reading "The Bodie Book," as to which we have little else to say than what the publishers tell us-viz., that it is work on Electro-hypnotism, Telepathy, Mental Suggestion, Clairvoyance, Magnetic Touch, and various other occult subjects, written by Dr. Walford Bodie, the well-known Music Hall and Theatre Entertainer." The author, like Dr. James Graham, is a Scotchman, who employs "the occult" in the treatment of disease not in a Tourney of the occult" in the treatment of disease, not in a Temple of Apollo, but in the Temples of Thalia, Melpomene, Terpsichore, and Polyhymnia (tickets 6d. upwards) and has laboratories in Blackfriars Road, S.E., and factories in Macduff, N.B., for the production of

Dr. Walford Bodie's world-famed Electric Liniment. An oleaginous solution, composed of vegetable alkaloids and organic salts the action of which upon the skin is electrical.

Dr. Bodie's famed Electric Life Pills. The greatest dis-

covery of the Age. Renews youth and vigour.

Dr. Bodie's Electric Dentifrice, Electrocone for the Hair,
&c.. &c. If you want to live long and be free from all ills flesh is heir to, send for List and full particulars.

This is purely coincidence, of course, and too striking not to mention.

Column—Bargains. Exchange

FROM A BUSINESS POINT OF VIEW IT PAYS TO WATCH THE EXCHANGE COLUMN.

A Chemist, writing on August 22, says:-

"I enclose cheque for my subscription to the 'C. & D.' I may mention I have cleared my 10s. many times during the year through your Exchange Column. Only last week the profit on an article bought through the Exchange Column paid my year's subscription."

FOR DISPOSAL.

APPARATUS.

Rotary pill-machine on stand, with piping machine; also 4-grain pillmachine (Maw's); offers. Noble, Chemist, Peterborough.

BOOKS AND PERIODICALS.

f The Dispensatory," by Drs. Wood and Bache, 17th edition, complete 7 parts, uncut. MANAGER, 21 Market Place, Chesterfield.

DRUGS AND CHEMICALS.

What offers? 2 lbs. or part Bush's ol. patchouli ang. 158/1, Office of this Paper.

OPTICAL AND PHOTOGRAPHIC.

Bi-unial lantern, cost £35 (Tylar's), good condition; accept £12 or exchange. Particulars, SAVAGE, Bradford.

No. 4 bull's-eye kodak, with leather case and film cartridge, complete; perfect order; 30s. or near offer; approval. HINDE, Chemist, Stoke Ferry.

Microscope (Ross), 2 objectives 1 and 2, 2 eye-pieces, triple nose-piece, cover glass, slips, slides, &c.; cost £10, sell £5. Jones, Dunstou, Stafford.

One 22×18 best mahogany double dark slide, 30s: $123\frac{1}{2} \times 3\frac{1}{2}$ singleplate carriers in leather case (Kodak), £1. HATFIELD, Chemist, Limehouse.

Half-plate stand camera, complete, two slides, Thornton-Pickard shutter, Beck lens; good condition; price £3 5s. RAMSDEN, Clifton House, Haywards Heath.

Spectacles (140 pairs), folders (130), optometers, &c.; complete outfit anyone commencing; average retail 2s. 6d. pair; perfect condi-

tion; what offers? 158/43, Office of this Paper Sale, or exchange equal value in lecture sets; shdes in new condition, 56 manufacture of linen, 60 East Coast from Thames to Tweed, 7 astronomical poser, 10 Holy Shrine, 3 Under the Mistletoe (two last colonred). WRIGHT, Chemist, Burnley.

Trial-case; unmounted lenses up to 20D sph., 8D cyl.; test types near point measure; adjustable trial-frame; retiooscope; Thorington's retinoscopic eye; Hartridge on "Refraction"; Taylor's "Manual;" price £4 16s,; will separate. "S. S.," 73 Osborne Road, For est Gate, E.

SHOP FITTINGS.

Large bandsome mahogany exhibition show-case, with shelves; bargain to clear. 171 High Street, Walthamstow.

Entire fittings (part or whole) for Chemist's shop; also dispensingscales, pill-machine, Martindale's extra, and other accessories. Lowest price, BALL, Chemist, Itchen, Southampton.

Must be cleared before quarter-day, magoificent wall fixture (glass cases); cost about £100, sacrifice £25; also ditto drawers and shelves £20. 171 Higb Street, Walthamstow.

Carboys (pear) and stands, 2 8-galls., £2; reversible pill-machioe, 3 and 5 grs, as new, 21s.: 12 2-gall. black-stoppered show-bottles, gold labels, 24s.; and suodries. FOULSTON, Chemist, Hull.

PROPRIETARY ARTICLES

Vimbos, clean, ounce 44s., 2-ounce 84s. gross. W. PRICE, 172 Bromsgrove Street, Birmingham.

Four 5s. 6d., 5 3s., 9 1s. 6d. Dobson's blackleg drinks, soiled; what offers? Brown, Chemist, Brigg.

Overstocked .- 36 1s. Harrison's rat-poison, absolutely new, 6s. 6d. doz. 150/19, Office of this Paper.

Overstocked.-24 1s. 6d. Cupiss' horse-balls; 6 1s. Cuffs's farmer's friend; in good order; cheap to clear; offers? TAYLOR, 117 Divis Street, Belfast.

12 doz. Mirella gold enamel, 1s. size; 6 doz, Chapman's cattle oil, 2s. size. 151/8, Office of this Paper.

SHARES.

Shares for Sale .- See p. 62.

MISCELLANEOUS.

O'Brien's patent receipt-giving till and papers. Offers to "OHEMISTS" 156/12. Office of this Paper.

Two stills, complete, for floral waters, &c.: also 15-, 9-, 8 inch mortars. What offers? 152/4, Office of this Paper.

National cash-register perfect condition, equal to new, total adder, and with sales printer; list price 45 guineas; what offers? 154/19. Office of this Paper.

20 pieces of honeycomb sponges, 2s.: 25 pieces ditto. 10½1.: good shape and quality; or exchange patents—Doan's, Beecham's, Williams' pills, rubber enemas. 156/6, Office of this Paper.

Honey, 1 cwt. or part, 56s., New Berkshire; †-plate T. T. and H. lens, mint condition, 30s., cost £2 16s.; guinea Pompom, 5s.; post-card Carbine, £2, slightly soiled. Hunt, Chemist, Reading

phons, Chemists filling their own; number of second-hand in first-class condition; tincture press; 4 h.-p. Crossley gas-engine; Gardner's sifter and mixer for power; canteeo acrated-water plant. Apply, MERCHANT & Co., Southport.

One 100-gallon drum, pure tinned, 9-inch cover fitted in contre of head, and brass tap and plug, cost £3 10s, price £2 5s.; also stand to carry same, cost 10s., price 7s. 6d., almost new. Apply to F. H. FAULDING & Oo., 54 Great Tower Street, E.C.

1s. Mirella gold, 4s. 6d. doz.; drums, wide mouth, roun¹ one 23×17, two 27×17, one 40×25, four flat-hinged lids 12×12×5; lot £2, carriage forward. MMKEE, Chemist, Acton, W.

Entire fittings, fixtures, bottles and utensils of a double-fronted corner shop, together with the entire stock of drugs, patents, photographic goods, &c., situate N. W. of London, for immediate sale for removal; value over £400; vendor having to vacate the premises is desirous of selling the above in one lot, cheap, to be removed before September 29; offering fine opportunity to anyone about to open new business, as stook is all new and clean, and fixtures substantial. In address apply BERDOE & FISH, Valuers, 35 Jewry Street, Fenchurch Street, City.

Wanted, offers for the following lot or separate: 1 Veedee vibrator, as new, cup and ball attachment; Hatch inhaler, complete as new; 2 bypodermic syringes in cases, cost 2s. 6d. each; 11 1s. 1½d. Leath & Ross's Neuraline; 23 6d. and 27 1s. Leath & Ross's homeeopathic pilules and tinctures; 2 1s. 12d. Nature's renovating pills; 1 2s. 6d. Durant's sandal-wood oil-capsules; 2 1s. 12d. Thompson & Capper's quin.-phos.; 33 2d. Sapolio; 1 9d. Plasmon; all clean, in saleable condition; no reasonable offer refused, Knowles, Dentist, Derby.

Offers.—12 each 40-oz. N.M.W.M. shop rounds; 24 each 20-oz. N.M.W.M. shop-rounds; 10 4-lb. blue ointment-jars, covered, all gold-labelled; case 3d. Diamond dyes; upright case Thompson & Capper's homeopathic tinctures and pilules; 1 5-ft bent countercase, equal to new; 1 dispensing-screen, 5 ft. 10 in. equal to new; 1 first-class sample-bag (height 12 in., depth 10 in., length 15 in.), with drawer, opens at front; 1 pill-machine, 5 gr., cut 12; 2 each Ci. and Cii. P.S. carboys; 6 No. 1, 2s. 6d., 3 No. 2, 2s. 6d., 20 No. 1, 1s. 1½d., 11 No. 2, 1s. 1½d., Valnera Tea. PARRY, Chemist,

WANTED.

Bougie mould. G. DICKINSON, 72 Archway Road, Highgate, N.

Complete optical test-case, with frame. TOTTLE, Chemist, Liscard, Cheshire.

Old artificial teeth bought; cash by return post. Dent, 3 Hinckley Road, Leicester.

Tooth-brush case, in good condition. Price, carriage paid, Leslee, Chemist, Haddington.

Minor Books.-Obemists' books, for cash or exchange. Gower, Bookseller, Waterlco, Liverpool.

Dispensing-screen. counter-case, 40 gallon tank; good condition. 155/8, Office of this Paper.

100 W. J. Bush, Ltn. £5 preference shares. State lowest price to "Buyer" (158/14), Office of this Paper. Small tincture-press, percolator, shop books, dispension and counter scales, suppository mould. ROBERTSON, 77 Westmoreland Street,

about three weeks' time, a small bouquet of blooms of Colchicum autumnale; good price offered. "M.," 45 Kidderminster Road,

To purchase second-hand iovalid couch, with commode in centre, oo wheels; width 30 inches: in good condition; state lowest price for cash. Pinch & Co., 5 Cheap Street, Bath.

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